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March, 1898.

Dr. J. B.

LETTERS
ON
YELLOW FEVER, THE CHOLERA,
AND
QUARANTINE,

ADDRESSED TO THE
LEGISLATURE OF THE STATE OF NEW YORK,
WITH
AN APPENDIX,
CONTAINING
CORRELATIVE CORRESPONDENCE,
AND
AN ACT
OF THE LEGISLATURE OF THE STATE
RELATIVE TO THE
PUBLIC HEALTH, WITH SUGGESTED AMENDMENTS.



SECOND EDITION—REVISED.

BY
ALEXANDER F. VACHÉ, M.D.,

FORMERLY RESIDENT PHYSICIAN TO THE ALMS HOUSE HOSPITAL; STATE COMMISSIONER OF HEALTH TO THE MARINE HOSPITAL, STATEN ISLAND; AND STATE RESIDENT PHYSICIAN TO THE CITY AND COUNTY OF NEW YORK; VISITING SURGEON TO THE BELLEVUE HOSPITAL; PHYSICIAN TO THE WILLIAM AND CENTRE STREETS CHOLERA HOSPITALS; HEALTH OFFICER OF THE PORT OF NEW YORK AND AT PRESENT PHYSICIAN, (IN CHIEF,) OF THE MARINE HOSPITAL, STATEN ISLAND.



New York:
BELL & SON, PRINTERS, 486 BROADWAY.

1854.

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INTRODUCTORY REMARKS.

THE following Letters on Quarantine, Yellow Fever, and Cholera Asiatica, were hastily written at the request of a Committee of each branch of the Legislature of the State. Originally printed as "Public Documents," at Albany, with no supervision of the "proofs," unavoidable errors were the result. Under such circumstances, they have been leisurely revised, and a few notes added, that they may be published in a more perfect form.

By reference to the table exhibiting the annual number of sickly shipping, cases of yellow fever, etc., it will be seen that those for the years 1845 to 1851, kindly furnished by Dr. JAMES O. VAN HOEVENBERGH, formerly Deputy Health Officer, and HENRY PATTERSON, formerly Clerk to the Board of Commissioners of Health, have been annexed. It will, also, be observed, that during the summer of 1848, an unusual number of vessels, infected with the virus of yellow fever, arrived at the Lazaretto, mostly from Vera Cruz via New Orleans; and that several patients, with the disease, were admitted from them into the hospital. They were, principally, discharged soldiers, on their return home, at the close of the war.

The subjoined statistical notes on cholera, were taken from

a file of the *Journal of Commerce*, for which I am indebted to the politeness of G. HALLECK, Esq., proprietor and editor of that paper.*

I, also, call attention to the transmission of cholera on the western rivers, during the last eighteen months, by the boats plying on them; and, to its unequivocal introduction at Ward's Island, through the *Vandalia*; as well as to its immediate appearance at St. Francisco, on the arrival of the *Caroline* with the disease on board.

It may not be amiss to state, that the land, belonging to the Quarantine establishment, is situated on the north-east-erly point of Staten Island, and contains about thirty acres of high ground, sloping towards the water, by which it is bounded on the east. It is $5\frac{7}{30}$ miles south-west of the most southerly point of the City of New York.

The largest Hospital is three stories high, one hundred and thirty-six feet long, and twenty-eight feet wide, with wings at each end, thirty-seven feet by twenty-eight feet.

Another, near the water, is three stories high, fifty feet in length, and forty-five feet in width, with wings at each end, sixty-six feet by twenty-six feet. Both buildings can accommodate four hundred patients.

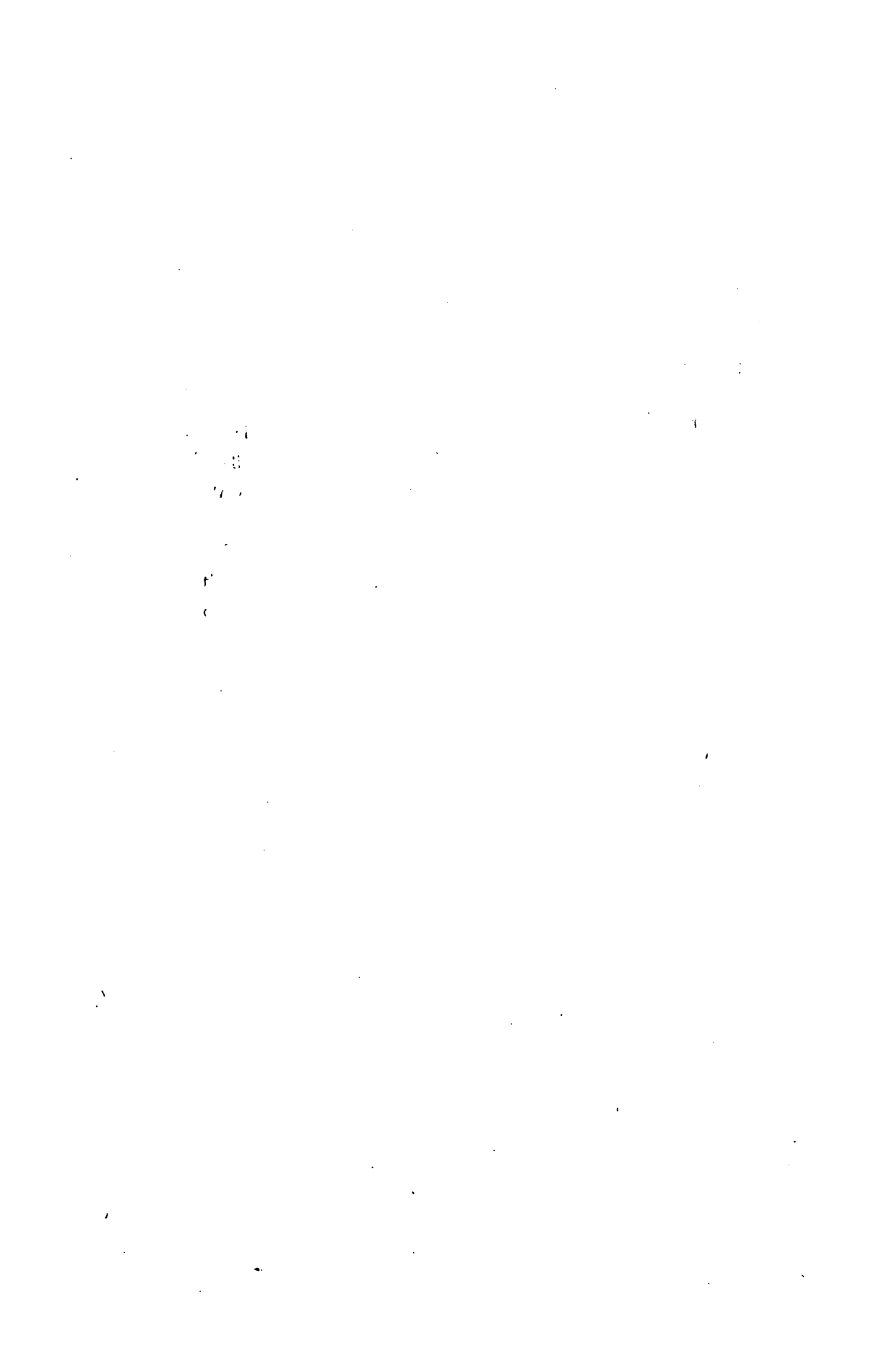
The Small-pox Hospital is two stories high, with piazzas in front and rear, eighty feet in length and twenty-eight feet in width, and it can receive fifty patients.

* Those for the years 1852, were derived from the columns of the New York Herald.

The Health Officer's House. The main building is thirty-eight feet by thirty, two and a half stories high, with a wing thirty-five feet by twenty feet, which is one and a half stories high.

Besides these, there are residences for the physician, (in chief,) for the deputy health officer, the assistant physicians, the steward, bargemen, etc. There are, also, two large stores, for the reception of goods, which belong to the government of the United States.

A. F. V.



A LETTER

ADDRESSED TO A SPECIAL COMMITTEE, APPOINTED BY THE ASSEMBLY OF THE STATE OF NEW YORK, IN RELATION TO THE IMPORTATION OF YELLOW FEVER, THE MODIFICATION OF THE QUARANTINE LAWS, ETC. ETC.

NEW YORK, NOVEMBER 5th, 1845.

GENTLEMEN:—I had the honor to receive your communication, in reference to the Quarantine Laws of the State, and in reply to the several inquiries, I shall confine my remarks, with slight digressions, to the main point at issue, viz: *Can yellow fever be conveyed from one place to another through the medium of vessels, merchandize, clothing, or persons?*

Wherever the malady has appeared, the question of its domestic or foreign source, has frequently led to controversies neither profitable to science, nor creditable to the parties involved in the discussion. Much, however, has been elicited worthy of serious consideration; each school has sought, with unwearied zeal, all the information to be obtained, with equal talent and equal learning; yet, the birth-place of yellow fever is a theme on which *antagonistic* volumes will, doubtless, be written, as long as physicians identify honor with pride of opinion, and partizans, determined not to be vanquished, adapt facts to pre-conceived theories.

My own views are strongly in favor of the *African* parentage of the disease, and I am decided in the opinion of its *specific* character. The fact of its not *changing its type*, and

of being *arrested by frost*, seem to me *conclusive* evidence of its tropical derivation, and of its peculiar form.

I am aware that it has been alleged to have *spontaneously* commenced in several interior portions of the United States, and in many of the towns and cities of the sea-ports; but I am strongly of the opinion that, in those instances, the disease was malignant bilious remittent, especially as the general symptoms of the latter, when epidemic, are very similar to those of yellow fever, and frequently require, in the absence of granulated black vomit, the maturest judgment of the most experienced practitioner to distinguish between them.*

In New York, the malady has always *first* appeared in the vicinity of the *harbor*, while in other parts of the city, where human beings were piled on each other in the most degraded and vitiated condition, amidst heaps of accumulated filth, and loads of animal and vegetable putrefaction; where hungry and naked individuals stalked abroad at noon-day, exposed to the fiercest rays of a summer's sun, and where the miserable and unfortunate inhabitants were driven to their damp, ill-ventilated, and loathsome rooms for partial shelter and temporary protection, during the pitiless storm—*it was never known*.

But admit that it can be endemic or local, and will prevail whenever the cause essential to its development exists, does that establish the assertion that the malaria cannot be derived from other portions of the globe, and disseminated wherever conveyed, distributing devastation and death to those within its fatal influence? Of this, however, enough. The intention of the Committee, I apprehend, was neither to enter into the arguments of medical men, nor to decide on the accuracy of conflicting hypotheses; but *to ascertain if the Quarantine*

* The desire of Health Officers to avoid censure, and the interest of owners and officers of suspicious vessels, must, also, be taken into consideration.

Laws can be modified with safety to the health of the community, and rendered less oppressive to the commercial interests of the country.

That yellow fever has been repeatedly introduced into this port by the liberation of a poison from the holds of vessels, few individuals acquainted with the history of the Lazaretto would venture to deny. The instances are too authentic and too numerous to be controverted by *uncertain* appearances in other localities.

Take, for example, extracts copied from the official record of a correspondence between STEPHEN ALLEN, Mayor, and Dr. JOSEPH BAYLEY, Health Officer, in relation to that disease, at the Quarantine ground, in the summer of 1821.*

After particular mention of the circumstances connected with vessels in Quarantine, and a detailed account of several stranded and brought in contact by the violence of a storm, it states: "The first person taken sick with the yellow fever, subsequent to the gale, was SETH WAITE, a lad seventeen years of age, who had performed the voyage in the ship Lucy Ann, last from Havana. His disease commenced on the 6th of September, as this vessel was proceeding from the Quarantine ground to the city, and he died in the Lazaretto, the 11th of the same month.

* Agreeably to the official reports, made in 1849, to a Select Committee of the Assembly of the State, by Dr. ALEXANDER B. WHITING, then Health Officer, Dr. SAMUEL R. SMITH, of Tompkinsville, and other physicians in the neighborhood, it appears that the disease extended during the summer of 1849, from vessels in the roadstead to the residences of upwards of one hundred and fifty individuals remaining in the vicinity of the bay, affording another conclusive illustration of the direct importation of pestilential infection; and positive proof, that the climate and atmosphere were still ready to receive it. Several of the physicians, the steward and his wife, the clerk, the bargemen, the nurses, a washer-woman, the patients, and other inmates, were attacked within the walls of the Institution, and a female who visited her uncle, afflicted with the malady, at Stapleton, was taken sick in New York. Although very ill, she recovered; and, as usual, no bad consequences resulted to her attendants.

This, therefore, is the third time of the introduction of yellow fever, at Staten Island, independently of a few individual instances from clandestine communication with restricted shipping, or contact with contaminated bedding, etc., thrown into the water. The first was in the year 1799, shortly after the selection of the present location. At that period the population was very small; about twenty-five persons were attacked, and but one recovered, Mr. ISAAC SIMONSON, who, I believe, is still alive to confirm the fact.

“A seaman died of yellow fever, August 13th, on board of this ship, and the mate, who was the last person taken sick, was convalescent and walking the deck the 20th of August, the day she arrived. This vessel, coming from an unhealthy port, having lost one of her crew with the yellow fever, and the mate having been sick with the same disease on the passage, were sufficient to excite our suspicion that she was an infected vessel, although she had only stone ballast on board from the time she sailed from New Orleans until she arrived at this port, via Pensacola and Havana, and her hatches had been off the whole voyage. It has been remarked that her ballast was all overhauled, and every part of the hold and forecastle was ventilated and whitewashed; between decks were scrubbed with an alkaline solution, and afterwards varnished. This was nine or ten days before WARTE was taken ill. This young man was actively employed for several hours in the afternoon and night of the 3d of September, during which time his clothes were drenched with rain. Three days after this, he was taken ill, which was eighteen days subsequent to any sickness on board of his vessel. Was this disease lurking in his system for two or three weeks? Could it have been caused by the violent motion of his vessel disengaging a greater quantity of foul air during the storm, or by the vitiated air of the *Ann Maria* alone, or combining with that from his own vessel soon after she was hauled alongside of the *Ann Maria*, and thereby rendering the atmosphere about them more loaded with contagion than either vessel could alone produce? In answer to these queries, it may be said, that the disease would have appeared immediately after his great fatigue and exposure in the gale, if it had been in his system eighteen or twenty days. If it arose from an increased quantity of infection, disengaged during the storm by the great motion of his vessel, it probably would not have commenced as early as the third day after the gale, for not one of the cases which occurred took place in less than five days after their first exposure to infected vessels. I am,

therefore, of opinion that his disease was caused by the contagion from the ship *Ann Maria*, in addition to that of his own vessel, for his ship was hauled alongside of her the 31st of August, and he had to pass over her deck to get to the wharf. Six days after this date, he was taken ill; which period of five or six days, will appear, by a majority of the cases subsequently stated, to be the usual time that this disease commences after its contagion has been received in the system.

"The Rev. Dr. *HARDENBURGH*, having engaged to officiate in the church near the Quarantine ground, on Sunday, Sept. 2d, visited his friend, Capt. Wm. *VAN BEUREN*, the preceding Saturday afternoon, when he amused himself two hours in fishing on the United States wharf, at the bows of the ships *Ann Maria* and *Lucy Ann*; he returned to the city on Sunday afternoon. The next Friday, September the 7th, six days after his exposure to the contagion of the above named ships, he was taken sick, and died the 12th. If his disease was yellow fever,* he, without doubt, received the infection while on the United States wharf.

"*JACK BRITTON*, a colored man, worked on the United States wharf, at the cargo of the ship *Mary L'Herondelle*, and other vessels, from Monday, September 3d, before the gale commenced, to Saturday noon, the 8th, at which time he complained of indisposition. He went home, and died the 14th of September. In this case the disease began in five days after he was first employed at the United States wharf.

"Miss *SARAH ANN VAN BEUREN*, aged eleven years, was on the United States wharf, Tuesday, September the 4th, and near to the brig *Mentor*, which was driven on shore before her father's house. Five days after, she was taken sick, viz: Sunday, the 9th, and died the 13th of September.

* There was no question of it.—A. F. V.

"JOHN HAWTHORNE, who was on a visit to his father, at Staten Island, was employed several hours on Tuesday, September the 4th, in pumping out the ship *Amphion*, lying at the wharf. He was taken ill on Sunday morning, the 9th, and died the 13th of September. Here we, also, observe the period of five days intervening between exposure and attack.

"PETER ANDREAS, a seaman belonging to the ship *Lucy Ann*, was taken unwell, September the 9th, and died the 14th; this is a period of five days after his great fatigue in the storm on the night of the 3d, at which time he would be more predisposed than before to be infected with the contagious air which was, probably, disengaged from its confinement by the concussion of the vessel against the wharf and shore.

"EDWARD WILSON, JOHN YOUNG, and JAMES WILLIAMS, with eight other men, were sent on board of the ship *Ann Maria*, Wednesday afternoon, September the 5th. They were all engaged in discharging her ballast, until Saturday afternoon, the 8th. On Monday, the 10th, they returned to Staten Island for employment, but were taken sick in the afternoon and sheltered themselves in Captain ARNETT's hay loft, until we were informed of their illness, the next day, when they were brought to the hospital, where the two first named died September the 13th, and the last on the 14th. In these three cases, we perceive the remarkable coincidence of those men becoming ill at the same time, and that in five days after they were first exposed to the contagious air of the ship *Ann Maria*.

"JOHN PATTERSON, first came to the Quarantine ground for employment the 5th or 6th of September, and worked on board the brig *Nancy*, from Havana, and some other vessels. On the 11th of September he was taken sick, and died the 21st of that month. Here, again, we have the same period of five or six days after this man was first exposed to conta-

gious air before he was taken ill. A girl about thirteen years old, who carried refreshments to the dock-builders, several times a day, while they were working on the United States wharf, was taken ill September 11th, and died on the 16th. This is a period of seven days after the gale. But the wharf was so much injured by the storm, that the men discontinued their work, until a new contract was made to finish it. It is probable, therefore, that this girl did not go there until a day or two after the storm.

“CHRISTOPHER CHARGOLD, three or four days after the gale, went on board the several vessels that were stranded, and, also, at the United States wharf. Five or six days after he first went on board of those vessels, he became sick, but recovered.

“PERRY ROADS, one of the dock builders who was employed either three or four days after the storm, to discharge or work at the cargo of the ship L’Herondelle, was taken sick the 12th of September, and died the 23d. In this case we notice the same period of five or six days, after he had been working either on board or alongside of the ship L’Herondelle. This man and JOHN PATTERSON had, apparently, struggled through the disease. We considered them as convalescent from the sixth to the ninth day of their illness, for they had no fever, slept well, and relished their food ; but PATTERSON, who bled freely from the gums in the early stage of the disease, became comatose on the ninth day, when the bleeding from his gums returned, and he discharged dark colored blood freely from his stomach and bowels. PERRY ROADS, on the ninth day, lost his relish for food, and although he took his drinks and medicines freely, still he became hourly weaker, and had no pulse at his wrist twenty-four hours before his death, yet his understanding was unimpaired to the last.

“JOHN WHITE, Quarantine gate-keeper, was frequently on

the public wharf, in the performance of his duty. He slept one night on board of the brig *Mentor*, and was taken sick the 13th, and died the 18th September.

“ Another daughter of Captain VAN BEUREN, who attended her sister during the first part of her illness, was attacked with fever the 14th of September, five days after she first nursed her sister. This young lady recovered.

“ Captain SLEIGHT, who, on the 6th of September, was first employed in transporting the cargoes of vessels from the public wharf to Brooklyn, took in a second load on Saturday the 8th, and slept that night on board of his lighter, which was lying at the United States wharf. He mentioned to his relations, when sick, that the last bale of cotton he put on board of his boat, was so offensive as to produce excessive vomiting, and he was impressed with the belief that he caught the fever from it. But I am of the opinion that the languor, which consequently ensued after violent vomiting, and his apprehension of danger from the cotton, predisposed him to be infected by the contagious atmosphere, which at that time prevailed about the wharf, and in which he slept the same night. He was taken sick the 14th of September, in the morning, five days after he slept at the public wharf, and died on the 19th of September.

“ Captain WILLIAM ARNETT, an Inspector of the Custom House Department, was informed on Tuesday afternoon, September the 11th, that three men were sick in his hay loft, near to his house; as he was alarmed for the safety of his family, he went there to have them removed, and the same evening, at Dr. HARRISON's, he expressed his apprehension, that he might have taken the fever from those men; and he was impressed with the belief that he would get safely through the season, provided he should escape that exposure. Early the next day he removed his family to

Elizabethtown, and on Tuesday morning, September 16th, when there on a visit, he was taken sick. This was precisely five days after he was in the hay loft, with the sick men, and he died the 20th of that month.

“While the brig *Andreas* was lying at the United States wharf, her captain, *ANDREW ROUNING*, and *MICHAEL DOLMAN*, one of her seaman, were taken ill on the 17th of September, and *JAMES WATKINS*, a seaman, who belonged to the schooner *Native*, then at the south side of Staten Island, also sickened the same day. The first recovered, and the two last died on the 23d of September.

“*FRANCIS MORGAN* and *PETER HOWARD* went to work on board the ship *Ann Maria*, the 12th of September, with sixteen other men, and continued there till the afternoon of the 18th. The same evening they began to complain. This was six days after they were first exposed to the contagion of this vessel; they recovered.

“Captain *VAN BEUREN* was taken ill on the 23d of September, and recovered. *MAGNUS LANDBOUR*, a seaman who belonged to the brig *Andreas*, sickened on the 26th of September, and recovered. *EPHRAIM TOMPKINS*, the last person who was taken sick with yellow fever at the Quarantine ground, went on board the ship *Ann Maria*, with seven other men, on the 2d of October. He became ill on the 7th, five days after he was first employed in this vessel, and died on the 11th of October.

“All those persons, whose cases have now been stated, were either on board or alongside of infected vessels, except Capt. *VAN BEUREN*’s daughter, who was attacked the day after her sister was buried. We are led to observe the remarkable circumstance, that twelve of those twenty-five cases, were taken sick on the fifth and sixth days after they were first

exposed to infected vessels, viz: the Rev. Mr. HARDENBURGH, JACK BRITTON, Miss SARAH ANN VAN BEUREN, JOHN HAWTHORN, EDWARD WILSON, JOHN YOUNG, JAMES WILLIAMS, JOHN PATTERSON, CHRISTOPHER CHERGOLD, FRANCIS MORGAN, and PETER HOWARD. This important fact may enable us to account for the disease occurring at the precise period of five and six days, in seven more of the twenty-five cases, viz: SETH WATTE, PETER ANDREAS, the girl who attended on the dock-builders, PERRY ROADS, Miss MARY ANN VAN BEUREN, Captain SLEIGHT, and Captain WILLIAM ARNETT, who, before that time, had been in an infected atmosphere; yet they escaped the disease until they were exposed to a more concentrated contagion, or having at such a particular time a greater predisposition to take the fever than they had before. The remaining six persons, viz: JOHN WHITE, gate-keeper, was taken ill twenty days after the infected vessels were brought to the wharf, and nine days after the brig *Mentor* was driven on shore, very near the place where he was stationed to keep the gate: but when he slept on board the brig *Mentor*, cannot be ascertained: Captain ROUNING, MICHAEL DOLMAN, and JAMES WATKINS, sickened thirteen days after their vessels were driven to the wharf: MAGNUS LANDBOUR was taken ill twenty-two days after the same period, and Captain VAN BEUREN one month after the infected vessels were hauled to the United States wharf, and nineteen days after the gale. If the inquiry had been made, it is probable that some special circumstances might have been discovered in each of those six cases, five or six days previous to their illness, as occurred in the seven cases before stated. But our attention was not drawn to the fact, that so many of those persons who had the yellow fever, were taken sick at this particular period after their exposure to the cause of it, until the pestilence had ceased, and they were discharged, or had died. It may be well to remark, that Captain VAN BEUREN removed with his family, Saturday, Sept. 15th, from the Quarantine ground to a place where he was breathing a pure atmosphere. This

would make him more liable to take the disease when he opened the stores on Monday, as the infected air in them would probably be rendered more malignant by their being shut up on Sunday. Six days after he was taken sick.

"The SINCLAIR family have not been enumerated in the order they sickened, with the other persons who had the yellow fever, because, all those persons had been previously exposed to the infected vessels; and, although Capt. WM. ARNETT and Miss MARY ANN VAN BEUREN appeared to have derived their disease from personal contagion, yet the evidence may not be considered conclusive. It has been stated, that the SINCLAIRS resided in the north basement story of the hospital, nine hundred and forty feet from the United States wharf, and two hundred and seventy-five feet from the brig Copernicon, the nearest vessel to their abode. She was from St. Jago de Cuba, and her crew had been healthy the whole voyage. After she was driven on shore, the mate's wife and child lived on board, with impunity, twenty days, during which time the damaged cargo was discharged. Mr. VANDERBILT's family, consisting of ten persons, lived one hundred and twenty-five feet nearer to this vessel than SINCLAIR's, and the same wind that would blow the foul air of this vessel upon the dwelling of the latter, would, also, carry it to the former; nevertheless, Mr. VANDERBILT's family all enjoyed good health. The brig Andromache was, also, one hundred and twenty-five feet nearer to VANDERBILT's, and fifty feet nearer to my residence than to SINCLAIR's. Hence it may be inferred that they did not take the disease from those two vessels, or all those persons from the city who resided on board, and the two families before mentioned, whose members were more than three times as numerous as the SINCLAIR family, could not have escaped the disease. As we do not know how far contagious air may be conveyed by a current of wind, and produce its deleterious effects, it may be contended that the SINCLAIRS derived their sickness from the

infected air of other vessels, although at a greater distance from their residence than those two brigs. I would reply that no other vessel, suspected to be infected, but those two brigs, were nearer to their residence than seven hundred and fifty feet, and as four out of six families, whose houses are within the limits before described, lived twice as near to those vessels as the SINCLAIRS, and continued healthy, with the exception of Captain ARNETT, their disease cannot be traced to that source.

“In further corroboration of those inferences, we have one fact directly in point, that the contagious air, on board of vessels, is not communicated two hundred and fifty feet in a *pure atmosphere*, aided by a favorable current of wind. The ship *Ann Maria*, was indisputably an infected vessel, for the men who worked on board of her, and were taken sick, could not have derived their disease from any other source, as she lay six hundred and thirty feet from any other vessel. Now this vessel remained six weeks only two hundred and fifty feet from Mr. FOUNTAIN’S house, during which time the wind frequently blew in a direction from this vessel towards his house, yet none of his numerous family or boarders were taken sick. This vessel lay twenty-five feet nearer to Mr. FOUNTAIN’S than the nearest stranded vessel did to SINCLAIR’S residence. Therefore, we must look for some other cause than the above, to account for the SINCLAIRS’ sickness; and the first inquiry would be to ascertain if they had been on the United States wharf, or near to any of the infected vessels. Both of SINCLAIR’S daughters assured me that they had not been nearer to that wharf, or to any of the vessels, than their dwelling for some weeks before the gale; and they and their father informed me, that Mrs. S. never was nearer to any of the vessels than her residence, except going to and from the health officer’s house twice, she passed as near as one hundred feet from the brigs *Copernicon* and *Andromache*, and about three hundred feet from the other sus-

pected vessels. JAMES SINCLAIR, health office boatman, had been on the United States wharf, and among the infected vessels, but not after the 11th of September, and as he was not taken sick before the 28th of that month, it is probable that he received the cause of his disease from another source. Having fully examined into the situation of all vessels which could have any influence in causing the sickness which prevailed in the SINCLAIR family, and finding none to which we can ascribe it, we will now endeavor to account for their disease from personal contagion and foul clothing. Mr. and Mrs. S. visited HAWTHORNE during his illness, and on the 13th of Sept., they and their daughters were at his house, making arrangements for his funeral. Mrs. S. did not visit any other person who had the yellow fever besides HAWTHORNE, but on Monday, the 17th of September, she received the bedding and clothing of WILSON, WILLIAMS, YOUNG, and WAITE, who died on the 11th, 13th, and 14th of the same month, some of which, particularly WAITE's, was so filthy, that she directed her daughters to go out of the wash-house, while she carried the clothing through it to the yard, where she put them into cold water. On the 22nd, early in the morning, five days after she had these foul clothing in her arms, she was taken sick, and died on the 26th of Sept. Her daughter Jane, from the commencement of her mother's illness, so frequently laid her head on her mother's bed and kissed her, that her father twice took her away, as he was apprehensive that she might contract her mother's disease. She was taken sick September 27th, five days after her mother was taken ill, and she died October 4th, with black vomit, previous to which time she had been three days under a free salivation. JAMES SINCLAIR was in bed with his wife when her fever commenced, and he was taken sick the 28th of September, six days afterwards. He died the 3d of Oct. SALLY SINCLAIR slept with her sister the same night that JANE was taken ill, and five days afterwards, on the 2d of October, she was taken sick and recovered.

"Could those four persons have received the infection from one and the same source, viz: from HAWTHORNE? I am of opinion that they did not take the disease from him, and that the daughters did not go there until his death, to make his shroud, or some of them would have been taken sick in five or six days after they were at his house; and it is probable that all of them would have been taken ill within an hour or two of each other, as occurred in the cases of WILSON, YOUNG, and WILLIAMS, who went in company on board the ship *Ann Maria*. The same circumstances happened in the cases of MORGAN and HOWARD. But Mrs. S. was not taken sick until the lapse of eleven days, and the daughter, who last sickened, not until twenty-one days after they visited HAWTHORNE. These reasons are conclusive, in my opinion, that the SINCLAIRS did not contract their malignant fever at HAWTHORNE's, but, that Mrs. S. caught it from the foul clothing she had in her arms; her husband and daughter from her, and SALLY S. from her sister JANE. The three last were not exposed to the infected clothing, consequently they must have taken the fever from personal contagion.* I am led to this conclusion from the important fact, that three of them became ill in five, and the other in six days after being thus exposed to the special exciting causes before related; for their becoming sick at that particular period cannot be considered as the effect of mere accident, otherwise it would not have occurred in nineteen cases out of twenty-five, who derived their disease from the infected vessels at the Quarantine ground.

* * * * *

"From the foregoing circumstances, it is evident that the yellow fever was not generated by any local causes existing at the Quarantine ground, but an imported disease, which existed in those vessels at the wharf, previous to the gale,

* This, in my judgment, is problematical. As members of the same family, they were, doubtless, exposed to the bedding and clothing of WARRS and others, which appear to have been saturated with fomes.—A. F. V.

and was, no doubt, greatly increased by it, as it brought many more infected vessels near to the wharf, and consequently augmented the quantity of infected air at that place.

* * * * *

"I am of opinion that the yellow fever is produced from a specific contagion ; for the twenty-nine persons who sickened in consequence of their intercourse with the Quarantine ground, all contracted the same disease ; twenty-one of whom died, and *fourteen* of that number had that fatal symptom, black vomit. If this disease is only a higher grade of bilious fever, and is not produced by a specific contagion, but from marsh miasmata, or animal and vegetable putrefaction, as inculcated by our professional opponents on this subject, would not some of the diseases which ensue from those causes, such as bilious remittents, remittents and intermittents, have, also, appeared at Staten Island from the same cause that occasioned the yellow fever? No idiopathic febrile complaint existed among the inhabitants, in the neighborhood of the Quarantine ground, previous to the gale.

"If, therefore, it is a fact, that yellow and bilious fevers originate from one and the same cause, a fairer test could not be conceived to show their identity than what actually existed during that period at Staten Island. If either disease had prevailed there, doubts might have arisen, whether both fevers were not derived from the same origin. For instance, if bilious fever had prevailed at Staten Island, before the 3d of September, and some of the inhabitants who had been previously exposed to the miasmata which gave origin to it, should be taken ill with yellow fever, after having been exposed to its contagion on the United States wharf, or on board any of the infected vessels at that place, our medical opponents would not allow that the disease was derived from the infected place or vessels, but attribute it to the same source that gave rise to the prevailing bilious fevers, and consider such a case as a proof of the identity of the cause

of both diseases, and call it a higher grade of bilious fever. But we, who believe that they are different diseases, and originate from different sources, would ascribe such an occurrence to the infected vessels, and not the local causes which had previously existed, and had produced bilious fever. But the facts now before us, furnish no pretence for caviling. As we find no febrile disease prevailing at Staten Island before the gale, we, also, perceive that the yellow fever was the only one which took place after it. As bilious fevers are changed into common remittents and intermittents, ought we not to meet with yellow fever changing into those diseases also, if it is only a higher grade of bilious fever? We further observe that bilious remittents, after becoming intermittents, are again converted into bilious remittents, and prove fatal. *Does the same principle of transmutability obtain in yellow fever?* If it does, I have never been favored with a view of such transmutation. If the dormant poison, lurking in the system of a person who has bilious fever, can be converted into yellow fever—and 'such change depends upon the additional causes of bad air, neglect of cleanliness, want of attendance, and of suitable remedies—then I know of no place more likely to accomplish this than the confined fore-castles of coasting vessels. Many persons with bilious fever are annually received into the Lazaretto under the above circumstances; yet I have never met with yellow fever cases in such vessels during sixteen years' residence at the Marine Hospital on Staten Island, except when it occasionally prevailed at some southern port; although bilious fever has been nearly as fatal, some seasons, as yellow fever usually is, yet I have never seen it terminate in black vomit.*

* * * * *

"I have now, agreeably to your request, endeavored to furnish you with a faithful narration of facts as they occurred

* There is a dark material, occasionally, ejected from the stomach, in malignant cases of bilious remittent. It is a different substance from the black vomit of yellow fever.—A. F. V.

at Quarantine, and have offered some observations which appeared to me to have an immediate bearing on this important subject. *I cannot suffer this opportunity to pass, without expressing my firm conviction, that rigid Quarantine regulations are essentially necessary to guard the inhabitants of our commercial cities against the introduction of pestilential and infectious diseases."*

The next instances, also taken from the records of the Board of Health, are striking illustrations of the difficulty of purifying infected vessels even when the cargoes have been landed, and all the ordinary modes have been strictly enforced.

"In the year 1819, the disorder was prevalent in several of the West India islands, and the fears of the Board of Health began to be excited that year, early in July, by the arrival at the Quarantine of several vessels that had lost some of their men by yellow fever. The French ship *La Florentine*, arrived at the Quarantine establishment from St. Pierre, Martinique, where the yellow fever prevailed at the time of her departure, and where she had lost one of her crew. This vessel was put under Quarantine for thirty days, and during that time, she underwent all the ordinary purifications, such as white-washing, fumigation, &c., &c., and on the 24th day of August, the health officer reported her to the Board of Health—as clean, safe, and free from infection—who directed her to be anchored in the stream, three hundred yards from the wharves of the city. Notwithstanding this vessel had undergone all the usual means of purifying vessels for thirty days, she, nevertheless, had two of her crew taken down with yellow fever on the 3d and 4th of September; when she was again ordered to the Quarantine, where she lay a few days, and then went to sea; but, having met with adverse weather, she returned on the 25th of Septem-

ber, *having lost her captain by yellow fever during the time she was out.*"*

"The brig Eliza arrived at the Quarantine on the 13th of August, in six days from Charleston, with one sick person on board, who died on the day of her arrival. She, also, performed a Quarantine of thirty days, during which time windsails were kept in her hatchways, her hold and fore-castle were three times whitewashed, her limbers were taken out and cleaned, and she was otherwise purified; when on the 16th of September she was allowed to come to the stream, three hundred yards from the wharves; yet, after all this cleaning, *her captain died of yellow fever on the 6th of October, and on the 7th one of her crew sickened of the same disease.*"

The subjoined interesting detail is taken from the record of 1822:

"The facts are numerous and indisputable, that the yellow fever has been communicated to individuals who had visited vessels, on board of which one or more persons had had that disease, or which vessel came from a place where it prevailed; and that they imbibed the infection, not only while the cargoes were on board, but after they were discharged, and the vessels thoroughly cleansed.

"A noted instance of this fact occurred this year, (1822,) on board the United States brig Enterprise. After the sick had been removed to the hospital, the well were landed, that they might not be any longer exposed to the infected air of that vessel, and to afford an opportunity of purifying her, which was done by slacking lime in her limbers and white-

* About this time the yellow fever made its appearance in Old Slip, and was attributed to the vicinity of that ship, and to the baggage of the original crew who had taken board in that neighborhood, in a house where the first cases occurred.—A. F. V.

washing her throughout, not omitting her iron ballast, in which operation three casks of lime were used, and she was well ventilated by four wind-sails, hoisted constantly in her hatchways.

“The crew were so intemperate, during the five days that they remained on shore, that we were under the necessity of sending them on board again. The brig had been purified in the interim, but it was soon evident she was an infected vessel, for in six days after the crew were sent on board, four men were taken sick with the yellow fever, and in the course of five or six days, seven more had the same disease, making a fourth of all the men on board, and five of the eleven taken sick died. Those persons must have been infected after their return to the brig, and subsequently to her purification, otherwise the disease would have been excited in them, as it was in some of their shipmates, from their irregular living and exposure to the weather, by lying on the ground at night.

“Those men were more predisposed to receive infection after their return to the brig, than they were previous to their landing, in consequence of having lived in a pure atmosphere, and being debilitated by repeated intemperance. This fatal evidence of the cause of the disease still lurking in the *Enterprise*, induced us to have the crew brought on shore again, and recommence her purification, which was done by using two more casks of lime; by letting into her hold, daily, several feet of water, and keeping up her wind-sails. Six men were left to take charge of her, whose duty it was to pump out the water and turn the wind-sails, and they were directed not to sleep in her hold.

“Twenty-five days after her arrival, and after repeated whitewashing, letting in water, and constant ventilation, one of the sailors obtained permission to take his wife on board:

this woman was taken sick on the 9th of August, with yellow fever, after she had been seven days on board, and she died in the Marine Hospital on the 18th of that month.

* * * *

“The vessel arrived at Quarantine on the 8th day of July, from a cruise via Charleston. Twenty-four days previous to her arrival, she had been three days off the Moro Castle, Havana, and she remained eight days at Charleston. Lieut. COXE was taken ill with yellow fever the day after her arrival at Charleston, and died on the 1st of July. Ten persons were sick with yellow fever on her arrival here. On the 9th of July, there were thirteen cases of yellow fever, received from the Enterprise into the Marine Hospital.

“On the 10th, Midshipman PLATT and Corporal COOPER, died, and Dr. TILLEY's life was despaired of. On the 11th, the number of cases had increased to twenty, and it was concluded to send the men on shore.”

I conclude this portion of the subject by recording a few more valuable statistics, kindly furnished me by Doctors WESTERVELT and VAN HOEVENBERGH, the latter, the present, and the other a former health officer of this port. Dr. VAN HOEVENBERGH remarks: “The records of the New York Quarantine furnish ample proofs of the importation of a malaria capable of producing yellow fever.

“Every year there is more or less yellow fever at the Lazaretto; many are ill on their arrival, but it is not uncommon for others to be attacked while performing Quarantine. Vessels have arrived from ports where the disease was known to prevail at the time of their departure, with all on board in good health, and after lying in the roadstead ten or fifteen days, the malady has broken out among the crew; and persons from the shore, employed to discharge and cleanse such vessels, have died with black vomit in the hospital.

"The following facts were taken from the Marine Hospital Register: they occurred under my own observation, and I can vouch for their correctness.

"The British brig of war, Buzzard, from the coast of Africa, anchored at the Quarantine ground, Staten Island, about the middle of June, 1838. The crew were in good health; but the coast was sickly, and they had lost a number of their men while there. She was placed in Quarantine the usual length of time. On the 3d of July, fifteen or twenty days from the time of arrival, a man died on board after an illness of twenty-four hours: he was reported to the health officer, by Dr. ROBERTS, surgeon of the vessel, as having poisoned himself by swallowing tobacco, to avoid doing duty. On the following morning, the vessel was visited, and one of the crew was sent to the hospital. During the next ten days, thirteen men were admitted with yellow fever, viz: MICHAEL TORBIN, CROSBY LOVETT, ROBERT HAGGERTY, THOMAS LEWIS, THOMAS DYER, THOMAS MARVIN, Lieut. WALTER POLLARD, Lieut. HENRY SEYMOUR, Midshipman FLOYD, THOMAS JONES, JOHN COWARD, MARTIN HUGH, and JOHN WILMOT. Two died with black vomit—CROSBY LOVETT and THOMAS LEWIS—Lieutenant POLLARD had the black vomit, but recovered. On the 14th July, the crew were landed, and remained on shore about six weeks, during which time, the vessel was thoroughly ventilated and cleansed. The Buzzard continued at the Quarantine ground until October, when she sailed for Europe.

"The ship Gustave Edward, from Havre, arrived at St. Pierre, Martinique, in June: discharged cargo, and took in ballast from the water. The vessel remained in port eighteen days, and sailed for New York July 9th, 1843. The captain procured a clean bill of health, and was assured, by the physician who granted it, that the island was entirely free from yellow fever. The crew were all well at the time of depart-

ure ; but on the second day out the cook was attacked with fever, and died July 19th. The vessel arrived at the Quarantine, July 23d, and two men were sent to the hospital with the yellow fever, both of whom were discharged cured.

“The ship was Quarantined thirty days ; while cleaning and whitewashing the hold, three of the crew sickened, and were sent to the hospital ; one died with black vomit, the others recovered.”

The annexed statement was given, under oath, by Captain JOHN SPEAR, of the brig Growler, on arriving, at the Quarantine :

“The brig Growler sailed from Boston, May the 14th, bound to New Orleans, and arrived June 12th. Immediately on the vessel's arrival four men were paid off and discharged ; the remainder of the crew enjoyed good health while at New Orleans : heard of no sickness among the shipping or in the city. The vessel took in a cargo of wheat, corn, pork, lard, and oil, and sailed July 10th for New York ; on the day of sailing, shipped four men in the place of those discharged : all hands continued well until July 27th, when three of the men sickened with the usual symptoms of fever. On the 30th of July, not one of the men was fit for duty ; one of those who sickened on the 27th, died on the 30th, and another on the 31st. The vessel being leaky, and the pumps choked, was run inside of the breakwater in the Delaware, August the 4th ; having had a survey, sailed thence for New York, August 6th, and arrived August 9th, 1843.

“(Signed,)

JOHN SPEAR.”

“The following cases of yellow fever were admitted into the Marine Hospital after her arrival, viz: August 9th, JOHN BROWN, discharged August 15th ; August 13th, JOHN HART,

discharged August 25th; August 13th, ROBERT HAVENA, mate, discharged September 1st; August 16th, JOHN SPEAR, captain, died August 21st.*

"SAMUEL HOPKINS, captain of the lighter Daniel Barclay, while employed in lightering the cargo of the brig Growler, to the public store at Quarantine, was attacked with yellow fever; he was admitted into the hospital, August 28th, and died of black vomit on the 31st. HOPKINS had, very imprudently and unnecessarily, gone into the hold of the brig, and remained there about twenty minutes.

"Dr. H. M. VAN DYKE, Assistant Physician of the hospital, was attacked August 28th, 1843. He had not been on board of any vessel from a sickly port; and therefore, he must have taken the disease either from his close attendance on the numerous cases in the hospital, from the clothing of the patients, or from the public stores, where the cargoes of infected vessels were undergoing purification. He recovered.

"Dr. JAMES HARCOURT, while in the discharge of his duties as deputy health officer, was frequently on board of vessels from sickly ports. He was taken ill on the same day as Dr. VAN DYKE; his case was well marked, and he convalesced slowly.

"The bark Eugenia, twenty-six days from Vera Cruz, arrived at the Quarantine ground, August 10th, 1844. Two passengers, one of whom had been ill two or three days, were sent to the hospital with yellow fever. PEDRO LA FENGUE, was discharged August 21st, and MATTHIAS CLASER died on the 12th.

* Captain Spear was apparently in good health on the arrival of the vessel.--A. F. V

"C. G. WALLACE, captain of the lighter engaged in discharging the cargo of the above vessel, went into the hold, and was admitted into the hospital August 28th, and died September 10th, a decided case of yellow fever.

"The York pilot boat Lafayette, from New York, arrived at Havana in June, 1839; remained there ten days, and returned in ballast. While at the port of Havana, and on the passage home, *no sickness occurred on board*; but during the Quarantine of thirty days, three persons were taken ill with yellow fever, who were engaged in cleansing and ventilating the boat, viz: ISAAC OXER, admitted in the hospital, June 29th, died July 3d, with black vomit; JOHN OXER, admitted July the 8th, recovered; Mr. LOCKMAN, a pilot, who took charge of the boat on its arrival, died with black vomit in the city of New York.

"Two of the pilots, Messrs. LEVOE and ALCOCK, were sick at their residences on Staten Island, as was understood, of the same disease.

"From 1799 to 1806, there were received into the Marine Hospital, with yellow fever, four hundred and thirty-four persons, of which number two hundred and twenty-two died.* The imperfect state of the register kept during that period, does not enable me to state correctly the ports from which sickly vessels arrived, nor the exposure of the persons who contracted the disease.

"The average annual number of patients received, with all diseases, into the Marine Hospital, Quarantine ground, for the past six years, was seven hundred and eighty-five.

"During the years 1811, '12, '13, '14, '31, '36, '37, '40, '41, and '42, no cases of yellow fever were received into the Marine Hospital, Quarantine; of which years, viz: 1811, '12, '13, and '14, commerce was interrupted through the non-intercourse and war."

Dr. WESTERVELT says, in a letter dated November, 17th, 1845:

"MY DEAR DOCTOR—In complying with your request of the 12th instant, I regret that I can only give you such facts as my memory enables me to furnish, having unfortunately lost my notes relating to yellow fever, taken in 1823 and '24; years very rich in the most important and valuable statistics of that disease at the Quarantine ground. I will not confine myself to the case of the United States brig Spark, but will give you some cases which came under my observation previously.

"In the summer of 1823, the brig Emeline arrived at the Quarantine, from St. Jago de Cuba, with the loss of her mate

* A large number of these cases were received from the city during the yellow fever of those years.—A. F. V.

by yellow fever on the homeward passage; she was permitted to haul alongside of the public store dock to land her cargo, consisting of coffee. After she was discharged, a man from the shore went into the hold with the crew, and helped them to wash down and sweep up the decks, being the only one of the hired men who had gone below in consequence of their fears that she was dangerously infected. The second day after, he was attacked with fever, and died in three days with black vomit. The vessel was thoroughly cleansed, ventilated, *hove down*, and coppered at Quarantine, and was, in every respect, prepared for a new voyage; a new crew, consisting of eight persons, were shipped, and went on board. In a few days several of them sickened, and some died in the Quarantine Hospital with black vomit.

"The ship *Diana*, from Havana, also arrived at Quarantine, during the season of 1823; two cases of sickness were sent to the hospital; the vessel was Quarantined thirty days; was discharged, ventilated, and cleansed, and in every respect subjected to the full requirements of the *law*. The crew were discharged in good health, and the vessel remained in charge of the mate, as *ship-keeper*. A few days before the expiration of Quarantine, the mate obtained permission to take his wife on board, on condition that she remained until the time expired. The vessel then proceeded to Brooklyn, *where the mate's wife sickened and died with yellow fever*.

"The distinguished jurist, JOHN WELLS, Esq., went on board, or resided in the neighborhood of the above vessel, and in a short time died of yellow fever.* She was then

* Several persons in Mr. WELLS's family, and others who resided in the vicinity of the vessel, and several who visited the place for bathing, were also taken sick, and many of them died with the symptoms of yellow fever.—A. F. V.

remanded to the Quarantine ground, and there remained, until frost made it safe for her to proceed to the city.

"The United States brig Spark, arrived during the Quarantine season of 1824, having been some time on the West India station, and last from Havana. Midshipman CLINTON had been buried at sea, two days previously, after a short illness. As in all instances of this kind, the great indisposition to give diseases their proper names prevailed, and consequently the nature of CLINTON's was not suspected until two days after, when other cases occurred on board, which unequivocally settled its character. Within a week, a number of persons, ill with yellow fever, were received in the Quarantine Hospital from the vessel. The crew, except enough to dismantle and cleanse her, were landed, and in a few days new cases ceased to occur among them. But when those who had remained on board for the purpose of purifying her, &c., were relieved by men who had been on shore several days, many of the latter sickened, and when they, in their turn, were relieved by others, these, also, sickened and fresh cases continued to occur, whenever new men were sent on board, even after the vessel had been scuttled, and had several feet of water in her hold; and infection did not cease until the water actually became *ice*.

"In reference to the appearance of yellow fever on Staten Island, in the neighborhood of the Quarantine, I find my memory too imperfect to particularize. I only remember that several cases and some deaths occurred; that the disease was well marked in its character, and that it was doubtless caused by some communication with the cargo, or clothing, or bedding of the crew or passengers of some infected vessel, brought on shore clandestinely, *in violation of law, and therefore, not to be divulged.*"

Many other examples might be given of the conveyance

of the disease to other portions of the world; but the above should be sufficient to satisfy the most skeptical. In those I have cited, it will be again observed how difficult and uncertain it is to disinfect a vessel, and what caution must be observed to prevent unnecessary and unjustifiable destruction of life.

That cargoes and the baggage of seamen and passengers communicate infection, I think, is beyond dispute. The proof I have already given, in the cases of Mrs. SINCLAIR and Dr. VAN DYKE. Those instances will probably suffice; although it would be easy to multiply them.* And why, I ask, should not goods and clothing be impregnated with *materies morbi* as well as the interstices or cavities of vessels? Are not the former as accessible as the latter, and will not the same effect follow its liberation?

To designate with certainty the countries whence the semina of the fever may be imported, is an impossibility. The commerce of the world commingles nations with each other to the extremes of the earth, and the introduction of infectious and contagious maladies, *where never before known*,† is as boundless as the destination of thousands of vessels piloted by the energy, enterprise and wisdom of mankind. Therefore, to regulate Quarantine laws by the enumeration of localities, would be as useless as oppressive. They should be made to apply *where diseases prevail*, and the Health Officer should be *compelled* to ascertain the truth, from the captains and officers, under oath, and from the passengers and crews, if necessary, of shipping arriving from suspected places, between the 1st of April and the 1st of November, with power to use his *discretion* in their detention, subject to

* See Essay on Yellow Fever, by B. B. STROUSE, M.D., late physician of the Charleston Marine Hospital.—Charleston, 1840.

† During the last eighteen months, yellow fever prevailed with severity at Rio Janeiro. It is the first instance, I believe, of the introduction of the disease on this continent, south of the equator.

an appeal to the Commissioners of Health, and from them to the Board of Health. I italicise the word discretion, because, as appears by the affidavit of Captain SPEAR, sickly ports are not always known to commanders; and port physicians surreptitiously give clean bills of health, as in the case of the Gustave Edward. Penalties of the severest kind should be enacted against prevarication and falsehood.

Experience, it is true, shows that ports within the northern tropic, as well as southern portions of the United States, are especially liable to the infliction of yellow fever, although many appear to be exempt at times, and others seem to escape altogether. It, also, emphatically teaches, that the disease occasionally prevails in northern, and other harbors, to a fearful extent; entering the dwellings of the rich and the poor, and destroying alike, amidst cleanliness and filth, hundreds and thousands of the inhabitants.

You ask, "Is yellow fever communicated by personal contact, or by an infected atmosphere?" The first question I unhesitatingly answer in the negative; for, regardless of the inconclusive experiments of drinking black vomit, sleeping with the sick, and wearing the shirts of the dead, by individuals exposed to the *cause* that gave the disease to those from whom they were endeavoring to catch it, I have never known a person to contract the malady from a patient removed from the infected district; and I repeat that I do not believe in its possibility.* To the second, I unequivocally reply in the affirmative. Whenever yellow fever has appeared, observation corroborates the fact. Commencing at a single point, the *secret agent* extends with measured steps, until it exhausts its virulence in the distance, proportionate to the quantity furnished by the source from which it ema-

* By this, it will be observed, that the detention of passengers is, in my opinion, of doubtful utility. Their soiled clothing should, however, be washed at the Quarantine, and the contents of their trunks freely ventilated, before permitted to leave it.

nates. Mysterious as it undoubtedly is, its slow and gradual approach fortunately gives timely warning of the danger, and allows thousands to avoid its grasp, by enabling them to mark, with almost unerring certainty, the *limits of its power*.*

Let it be remembered that the malady has not appeared in this city for nearly a quarter of a century, and not since the present health laws have been rigidly enforced;† therefore, let us not forget, in our zeal for innovation and improvement, the good old maxim, "Let well enough alone." Admit they are, in a measure, restrictive to commerce, and burdensome to the merchant; will any calm observer deny that they are alike protective of his life and conducive to his interest? The pecuniary loss sustained in a hundred years by the Quarantine establishment, cannot equal the ruin and desolation of a single season of the pestilence. Who does not shudder at the memory of closed dwellings, the suspension of business, the shunned city, the Quarantine abroad, and the sepulchres of hundreds, during the summer of 1822?

I have scarcely alluded, you will observe, to the epidemics which have prevailed in this city, at various periods; not because I think a disinterested review of the facts to be gathered from the archives of the Board of Health would be uninteresting or uninformative at the present day; but because I do not wish to revive the feuds of former times, when many of the parties to them are dead; and because I prefer confining myself, in a great degree, to the investigation under immediate consideration, and to the experienced views of men more recently familiar with the subject. It may not be

* The small mortality in 1819 and in 1822, was attributable to the comparative depopulation of the infected districts, and to the avoidance of them by visitors.

† And never will, as long as the statute remains as it is, and its provisions are observed to the letter.

amiss, however, to annex extracts from communications of STEPHEN ALLEN, Mayor, and his associates in Committee, and of Dr. DANIEL D. WALTERS, of this city, in relation to the fevers of 1819, '21, and '22.

Mr. ALLEN says:—"In the latter part of July, 1821, information was received by the Board of Health, that the yellow fever had appeared in Baltimore, and the necessary measures were accordingly adopted, by Quarantining the vessels from that port, and such other restrictions as were deemed proper, for the purpose of preventing its introduction into this city.

"On the third day of September, a storm of uncommon violence occurred in this city and its neighborhood; the rain fell in torrents, which, together with the great rise of the tide, inundated all the low grounds and cellars on the North and East Rivers. Measures were immediately adopted by the Board of Health, to have the water carried off, and the cellars ventilated and cleansed, in order that no injurious effects might be experienced by the inhabitants, or the health of the city impaired by this event. The effects of the storm on the surrounding country were very destructive, both on the land and on the water. At the Quarantine establishment, Staten Island, a number of vessels were driven on shore and stranded, and it became necessary to permit some of them to come up to the ship yards in the city, in order that they might repair damages, although their full term of Quarantine had not expired.

"About this period, several cases of yellow fever occurred in the city, and created some alarm in the minds of the inhabitants. On the 8th of September, there were two cases reported to the Board, one at No. 279 Front street, and one at No. 80 Wall street. The first case was that of JAMES VAN ALLEN, second mate of the ship Hebe. This ship had arrived from New Orleans, on the 4th of July, with the loss of three

of her passengers by sickness, one on the 7th, and two on the 14th of June. Two of them were reported to the health officer as having died of consumption, and one of diarrhoea. Mr. VAN ALLEN was employed on board of this vessel for two or three weeks before he sickened. He had been, for several days, engaged in the hold of the ship, stowing her cargo, and was so engaged until the 3d of September, the day on which he was taken ill. The second case was SETH WAITE, who arrived in the Lucy Ann, from Havana, on the 20th of August. The vessel was put under Quarantine for thirty days, but owing to the damage she had received in the late gale, she was permitted to come up to the city to repair, and arrived at the ship yards, near Corlear's Hook, on the 7th of September. WAITE complained of being sick while the vessel was coming up, and on her arrival took board at No. 80 Wall street. Both of these persons were sent to the Marine Hospital, where they died.

"Two more cases of yellow fever were reported to the Board of Health on the 27th of September; the first, THOMAS C. HAWLEY, residing at No. 58 Oak street, but doing business at No. 11, west side James slip; and the second, DAVID COLLINS, residing at No. 36 Banker street, but worked as a blacksmith at No. 213 Water street, adjoining in the rear, the place where HAWLEY did business. They both died on the fourth or fifth day of their illness.

* * * * *

"On the 8th of October, there was a case of yellow fever reported to the Board of Health, at No. 68 Eldridge street; this was HENRY S. W. LEE, a clerk in the store No. 48 Water street, who died on the same day he was reported; there were, also, several suspicious cases in Stone street, but the Resident Physician declared them the ordinary bilious fever of the climate, although several physicians persisted in the opinion that they were cases of yellow fever."

Again, he says in a letter to Dr. BAYLEY: "It appears to me by no means improbable, that a large quantity of merchandize, brought immediately from the holds of infected vessels, and landed in the vicinity of Rector street, may have been the cause of the pestilence now prevailing in that part of the city; and as it is clearly your opinion, that a sufficiency of contagious air may be, by this means, introduced into the pure atmosphere of this city, so as to cause yellow fever, it follows of course, that this cause ought to be prevented, by prohibiting the introduction of any part of the cargo of an infected vessel, until it shall have been landed and properly ventilated.

"If it is probable, then, that infection may adhere to the rough boards of the packages constituting the cargoes of an infected vessel, and admitted that it will continue in the holds of such vessels, after all the ordinary means have been used to expel it, may not some of this infection have been disseminated by the vessels alluded to in my letter of the 3d instant?

"That vessels will contain this infected air, after they have been whitewashed and ventilated, has been sufficiently proved by the occurrences of the last year, in the instances of the *Lucy Ann*, *Ann Maria*, *Lyon*, and *L'Herondelle*; and in 1819, by the ship *La Florentine*, on board of which some deaths by yellow fever occurred after her discharge from Quarantine; and in the present year, by the United States ship *Enterprise*. There have been a number of West India vessels at the wharves near Rector street, but those which I suspect the most, are the ship *Shamrock* and the schooner *Florida*,* alluded to in my letter of the 3d instant. The *Shamrock* left *Mantanzas* on the 1st day of June last, and

* The ship *Shamrock* arrived on the 11th, and the schooner *Florida* on the 21st of June. They were both put under Quarantine for four days.

was at Havana early in May preceding, both of which ports are now sickly, and may have been sickly at the time they left them, without being known to the captains of the vessels; for our own experience confirms the fact, *that the yellow fever generally prevails for several weeks at a place before it is officially announced.* To the Florida I attach much suspicion; she is said to have left this place in November last for St. Mary's, thence to St. Augustine, and from thence to Havana, then to Florida Reef, and from there back to St. Mary's, as reported by the captain. But I am led to believe, there is some omission by the captain, in the detail of this report; and I strongly suspect that this is the same schooner Florida mentioned in a letter dated St. Augustine, which Dr. Hicks, one of the assistants to the Board of Health, informs me he received from Mr. WALTER SMITH, stating that the yellow fever was introduced at that place by the schooner Florida, Captain JOHNSON, from Havana. The Shamrock was permitted by the commissioners to haul to the wharf at Rector street, on the 25th of June, and the Florida on the same day her Quarantine expired, and they both continued there until their departure for sea. The question is, from which of these sources has the present sickness proceeded? Was it from the cargoes of infected vessels landed in the vicinity of Rector street, or from the vessels alluded to above, or was it from the combination of both? * That it proceeded from any local cause in that district of our city, *appears to be totally out of the question*, since none can be pointed out that has not an existence in almost any other part of the city. We have, doubtless, much to learn on this important subject, and for myself, I have no hesitation in acknowledging my lack of information. My only guides in these matters are

* Although there were, indisputably, several extremely suspicious vessels at the foot of Rector street; it is quite certain, that the disease appeared about five days after the landing of a very large quantity of sugar in boxes, in its vicinity by "Lighters," which had been in contact for hours, with yellow fever shipping at the Quarantine ground. The first cases were two children, who resided in the neighborhood, and were simultaneously taken ill. They were attracted to the wharf by the novelty of a large turtle, suspended in the river from the schooner Florida.—A. F. V.

experience and observation, and from these I draw my conclusions.

“The sickness of 1819, could not be traced satisfactorily to a cause, neither could that of 1821, which caused the death of VAN ALLEN, COLLINS, and HAWLEY; but they both occurred in the vicinity of the wharves, and although it could not be ascertained that any infected vessels had lain in the neighborhood of the place where those persons had sickened, yet there was not a doubt, indeed it proved, on examination, to be the fact, that several vessels from West India ports, not considered sickly, had been permitted to haul to the docks at the Old slip, in 1819, and at Roosevelt street and James slip, in 1821, and it is by no means improbable, that cargoes of infected vessels had been landed at both these places, as the practice then was, as now, to permit it to be brought to the city in lighters, *immediately on its discharge from the vessel at the Quarantine*. There is, in my opinion, therefore, sufficient cause to fear the evil consequences of permitting, during the hot months, vessels under the following circumstances to come to the wharves of the city. That is to say: all vessels which at any time of the year have been at those ports where the yellow fever annually prevails; or vessels that have been trading among the West India ports during the year, or during the winter months, and have not experienced the renovating influence of frost, to expel the infected atmosphere of that climate from their holds. Neither ought the cargoes of infected vessels to be landed in the city until they shall be properly ventilated and cleansed; and if the provisions of the present law are not sufficient to authorize the aforesaid measures, it ought to be so amended as to meet the object proposed.

“It is admitted that much inconvenience would result to a portion of the mercantile community from the strict enforcement of the aforesaid measures, but it is believed that the

loss of property in the aggregate, will be much greater, if our citizens shall be compelled annually to flee from pestilence, than would result from a system of strict Quarantine, duly observed and rigidly enforced. I am well persuaded that it is the interest of this city, that every facility should be given to commerce, consistent with the health of the inhabitants; and in order to mitigate the inconvenience to which the owners of vessels, trading to sickly or suspected ports, may be subjected by restrictive measures, and in order that the detention of the cargoes of infected vessels may be attended with the least possible disadvantage to the owners or consignees, I am of opinion, that store-houses ought to be erected at Staten Island, and at other places out of the city, for their reception at the public expense."

Dr. WALTERS, in an able letter to the Board of Health, on the fever of 1822, attributing its origin to infected vessels or their cargoes in the vicinity of Rector street, and "not to an old sink, a cesspool, a rotten potato, or a putrid mouse," remarks, on its simultaneous appearance at Lombardy and Cheapside streets:

"When one half of a large city was so overspread with pestilence, that thousands of its inhabitants have been forced to fly to its more healthy parts for safety, and when the intercourse of necessity, of business, of friendship, of curiosity, and of knavery, have each had their share of influence, it appears very idle to expect to trace every case which may occur elsewhere to the district first infected;—each kind of intercourse here mentioned, occasionally, no doubt has its victims. When, however, the communication has been carried on for the purposes of knavery, it is not very likely that those who have sickened from it, will be very communicative on the subject, unless the facts be wrung from them at the hour of death by the pangs of a guilty conscience. The particular cases of fever now to be noticed were caused by the

intercourse of friendship or affection ; and, as we should expect, in all like cases, we find in this, that the family who suffered most held more communication with admitted infection, or with the infected district, than all the people of the Seventh Ward besides. The facts are these : on or about the 7th of August, Mr. SAMUEL WARD, who resided in Lumber street, within the infected part of the city, sickened with yellow fever, and was reported as such by Dr. PERKINS, to the Board of Health. Here he lay ten days very ill. During this time, his father's family, who lived at No. 20 Cheap-side street, manifested on this occasion the most laudable anxiety for his welfare. He was not only visited daily or oftener, by his father and mother, but his brother, a dumb boy, fifteen years of age, and a sister of thirteen, were constantly with him as nurses or assistants. They slept at his house every night until the 17th, when it was thought that he had so far recovered as to enable him safely to leave Lumber street, which he did, and went to his father's house, whence he set out for the country next day. He brought with him from Lumber street a quantity of clothing, which, however, was said to have been washed there ; that is, washed in pestilence, and dried in the poison of pestilence. About five days after he was gone, his brother and sister above mentioned, who had returned with him to their father's house, both sickened with fever. The sister's case was not very severe, but the brother was extremely ill ; and, as he could not speak, he exposed his sense of pain by laying his hand on his head, his back, and stomach. On the fourth or fifth day of his disease, he was taken with profuse bleeding from the nose : after this, they both gradually recovered. Now, there is not, in my mind, any manner of doubt, but that both these children had yellow fever. A few days after this, another daughter of the elder Mr. WARD was taken ill. Dr. BOYD was called in, who, no doubt, very correctly reported it yellow fever ; and in a few days more, the elder Mr. WARD and another son were seized with the same fever, both of whom died. Mr.

WARD's house and its immediate vicinity, may now be fairly considered a second infected district, located only about sixty or seventy feet from No. 4 Lombardy street, where it appears from the following affidavit and certificates, that another spark of the poison was set afloat.

No. 1. (A Copy.)

"JONATHAN DARROW, cartman, No. 5 Jefferson street, in the city of New York, being duly sworn, deposes and says :

"That on or about the 2d day of September, in the present year, he was requested by a young man, at or near the new market, at the bottom of Catharine street, in the city aforesaid, to take up and put on his cart, two chests, a bed, a hammock, and a bundle of clothes, tied up in a blanket. This young man had with him a sailor, as from his dress he appeared to be, who appeared to own a part of the things aforesaid. The young man first mentioned, after the articles were put on the cart, got on himself with them ; he then requested this deponent to drive to No. 4 Lombardy street, which request was complied with. While on their way thither a conversation took place between this deponent and the said young man, in which the latter observed, 'a part of these things, now on the cart, does not belong to me, but they did belong to a young man who lately died of yellow fever,' or words to that effect. And this deponent further says, that he drove his cart to the house No. 4 Lombardy street, where he delivered that part of the goods, to wit: one chest, one bed, and the blanket containing the clothes, which the young man above mentioned had charge of, to an old woman and a young woman, who both received the goods, and placed them in the entry of the house No. 4 Lombardy street. And this deponent further saith, that he then drove into Banker street, about half-way between Catharine and Market streets, where he delivered the remaining part of the goods,

to wit: one chest and hammock. And further this deponent saith not.

(Signed,) "JONATHAN DARROW."

Sworn before me, this 18th }
day of December, 1822. }

(Signed,) HARRIS SCOVEL,
Assistant Justice.

No. 2. (A Copy.)

"We whose names are hereunto subscribed hereby certify, that we saw, during the first week of September, in the present year, several times, a chest on which was placed a bundle of clothes or bedding, as they appeared to be, tied up in a blanket, as we believe, standing in the entry of the house No. 4 in Lombardy street.

"Given under our hands, the 18th day of December, 1822.

(Signed,) "WILLIAM H. MOTT,
FRANCIS SCHRODER,
ELEBRAD POLHAMUS."

No. 3. (A Copy.)

"I, SARAH POTTER, residing at No. 23 Lombardy street, hereby certify:

"That I was employed by the late Mrs. CARY, and the late Mrs. SNOW, on Tuesday, the 3d of September, in the present year, to wash some bedding and clothes, which I was

informed had or did belong to some person who had been sick, and that I accordingly did wash one rose blanket, one bed-quilt, one pair socks, one handkerchief, one waistcoat, and three shirts, and that the shirts were very offensive, and very yellow. And that, while I was washing said clothes, the late GEORGE WASHINGTON MOTT came near to the washing tub, and inquired of me whether I took in washing.

"Given under my hand, this 8th day of December, 1822.

(Signed,)

"SARAH POTTER."

"On two occasions, it seems that infected clothing or bedding may be peculiarly mischievous, viz: when they are first opened in a warm atmosphere, after having been long closely packed up; and again, when they are put into warm water, for the purpose of washing. The profuse vapor of warm water, seizes the matter of infection with the utmost avidity, and conveys it, in its most active state, to the noses, mouths, and lungs of the by-standers. This fact was shown in a very striking manner; for at the time the clothes, referred to in document No. 3, were washing, GEORGE WASHINGTON MOTT, having that day come to the city, was with Mrs. CARY, and Mrs. SNOW, standing by the tub; they all sickened with yellow fever on the same day, and died within a few hours of each other. The infection in Lombardy and Cheapside streets reached to Catharine street; thus taking possession of three principal avenues which lead to the wharves and the new market, from the upper part of the city; and to this second infected district, no doubt, we may justly charge some cases of fever which occurred to the eastward and northward of it, and which were not, at the time, fairly traced; a case in point was that of Mrs. D. ROGERS. There were, however, three or four cases that fell under my observation, which were reported to the Board of Health as yellow fever, in the upper part of the city, about which I shall not speak, unless I was

disposed to trace a drunken frolic, or something as unlike yellow fever as drunkenness, to the infected district."

I find it was subsequently ascertained, on the authority of Captain GEORGE MILLS, an assistant of the Board of Health, that Mr. CARY had been sick, and had arrived in the ship Superior, Captain JOCELYNE, from New Orleans, which vessel was Quarantined for six days, and ordered to Brooklyn to discharge her cargo. Did not the clothes, &c., belong to him?

The introduction of Croton water, will doubtless assist in cleansing the streets, etc., and aid in the purification of the atmosphere by the removal of nuisances; but its indiscriminate use would probably counterbalance the beneficial effects, by the evaporation from a heated surface, should yellow fever invade the city. Time has shown, that the only reliable disinfecting agent is a temperature approaching thirty-two degrees of Fahrenheit's thermometer. I do not believe an ocean of water can wash the disease away.

You are aware that the law excludes *all* vessels subject to a detention of two days, "unless they shall have sailed from some port in the West Indies, or in America, south of Louisiana, and north of the equator, or from some port or place in the United States, south of Georgia, before the first day of June," from mooring within prescribed limits, when released by the Health Officer, "*between the first day of June and the first day of September, in the year of their arrival*, and consequently, that they are driven, for the discharge and reception of cargo, *three months in the year*, to Brooklyn, or some other locality, much to the injury of the owners of store-houses in the city; greatly to the inconvenience and oppression of merchants; with serious pecuniary loss to consumers, and without much security to New York, from the near vicinity and constant communication between it and Long Island.

You, also, doubtless know, that all thirty days vessels are subject to like restrictions, and that on these points the statute is clear, imperative, and without reserve, unless to those "from healthy *ports*, wholly loaded with salt." That the sections originated from the difficulty of ascertaining, with certainty, their condition, as well as the health of the ports from which they sailed, and was framed for additional security, at a time when this city was practically suffering under the terrible and afflicting visits of pestilence, I do not doubt ; nevertheless, I think it will be perfectly safe, by enlarging the powers of the Health Officer ; by the requirement of bills of health from American Consuls and others abroad ; and by the enactment of penalties, proportionate to the consequences of the offence, to allow them, under proper restrictions, to proceed direct to the wharves on the expiration of Quarantine.

With these views, I respectfully offer, for the consideration of the Committee, the following amendments to the present act, which I recommend to be re-arranged and republished in a collective form.

1. That it be made *obligatory* for the Health Officer to put captains, mates, and others, under oath, in all cases of suspected vessels or ports, from the 1st of April to the 1st of November, in each year; and that he have *discretionary* power to detain such vessels for "observation," if not otherwise provided for by law, such time as he may think necessary, subject to an appeal to the Commissioners of Health, and from them to the Board of Health.

2. That severe penalties be inflicted for perjury, or any violation of law, by imprisonments, or fines, or both; and, if by a fine, that power be given to libel the vessel for its collection, whenever found in the port of New York, and that the Mayor and Commissioners of Health be authorized and directed to prosecute every offence.

3. That all two day vessels, when liberated from Quarantine, be allowed to come *to the wharves of the city*, with the consent of the Mayor and Commissioners of Health.

4. That vessels from a sickly port, on board of which *no sickness*, of an infectious or contagious character, has occurred while in said port or during the voyage, shall perform Quarantine for thirty days, and shall discharge cargo, be ventilated and cleansed. If, during that time, no sickness appear in persons communicating with her, she shall be discharged, and be allowed to come *directly* to the wharves; but, *if such sickness manifest itself on board previous to, or appear during her Quarantine, she shall not approach within three hundred yards of the city, until the 1st of October*, but in no case without the permission of the Mayor and Commissioners of Health.

5. That the commanders of all vessels, arriving between the 1st of April and the 1st of November, be required to produce a certificate of the health of the place or places they have been at during the voyage; if from a foreign port, from the American Consul, or from proper authorities abroad; and if from ports in the United States, from the Mayor, or other authorized persons.

I, also, suggest the propriety, as well as the necessity, of introducing a section in the law, against the importation of small pox during the intermission of the Quarantine laws. At present, vessels having on board that disease, are not subjected to a visit from the Health Officer in winter, and are constantly importing the virus from which it spreads, not only rendering futile the efforts of the Board of Health to eradicate it, but destroying, as the weekly bills of mortality exhibit, a large number of persons in the interim. Fortunately, vaccination is a partial preventive; otherwise, that greater scourge, unarrested, like yellow fever, by change of wea

WASH: D.C.

ther, would prevail extensively and fatally throughout the year.*

In conclusion, I present, for the reflection of the gentlemen representing the Legislature of the State, the expediency of extending the Marine Hospital to the reception of immigrants, during the two years for which they are bonded, after their arrival in this country. At present, they are only entitled to its benefits, if ill, on reaching this port, and not if taken sick, in the city, subsequent to that event. Thus the immigrant pays his money for the enjoyment of a privilege not one in hundreds require, while he is, also, compelled to indemnify the owners, consignees, or captains of vessels, in increased price of passage, for the risk they incur, and the expense for which they are liable, should the individual become chargeable to the city for support and medical advice.† By this proposition, I do not mean that the Quarantine establishment is to be converted into a *poor-house*,‡ neither do I mean that it is to be overloaded with *invalids and incurable cases of disease*; but that it shall receive such as are, in the opinion of the Commissioners of Health, proper persons for admission into any hospital, *not connected with charitable institutions*. In framing the law, *this must be carefully and explicitly regarded*, otherwise it will lead to interminable altercation. The Legislature, you are aware, reduced the amount to a sum as nearly adequate to the disbursement as was possible to ascertain, and for the purpose of carrying out the proposition, it will be necessary, in order to meet the increased expense, to establish a tax, equal to the support of the institution.

* There were four hundred and thirteen deaths by the small-pox, from the 1st of January, 1845, to the 28th of December, inclusive.

† The adoption of this suggestion by the Legislature, in 1846, was of no pecuniary advantage to the immigrant. The *price of passage* continued the same, and the merchant, etc., relieved from their previous liability, received all the benefit.

‡ If not converted, *precisely*, into a poor-house, it assuredly was into a general immigrant hospital, which as effectually destroyed the original intention of the establishment. Crowded to excess, without the means of preventing the well from coming in contact with the sick; and compelled, for want of room, to intermingle, in the same building, fatal diseases of a contagious nature with those of a mild and inoffensive character, it may well have been said, that the unfortunate victims "were doomed to lie down with the plague and shake hands with the pestilence."

In my opinion, and in the judgment of my colleagues, Drs. VAN HOEVENBERGH and HARRIS, *one dollar* would be sufficient. It may be proper to add, that the Hospitals at the Quarantine ground are large enough for the purpose, unless there should be an unusually sickly year.*

I have given your letter, to the extent of my ability, the reflection which the importance of the subject requires, and if I have succeeded in elucidating it, in the smallest degree, I shall be more than repaid for the labor.

With every consideration of respect, I remain,

Your obedient servant,

ALEX'R F. VACHE, M.D.,

*State "Resident Physician and Commissioner of Health,
of the City and County of New York."*

To the Hon. DAVID E. WHEELER,

CALVERT COMSTOCK,

REUBEN H. HINE,

Special Committee in Assembly, Albany.

* The vast increase of immigration subsequently rendered the erection of several other buildings necessary. They are of wood, one story in height, and are elevated about four feet from the surface by brick pillars. They will contain upwards of five hundred patients.

A BRIEF HISTORICAL SKETCH
OF THE
RISE AND PROGRESS OF CHOLERA, &c., &c.,

IN A LETTER WRITTEN TO THE

HON. C. D. ROBINSON,

CHAIRMAN OF THE STANDING COMMITTEE ON MEDICAL SOCIETIES AND COLLEGES IN THE SENATE
OF THE STATE OF NEW YORK.

NEW YORK, February 23d, 1850.

SIR:—To your letter in relation to “the origin, progress, cause, and treatment of cholera, together with what alteration or revision in existing laws, and what new sanitary regulations my experience in the late epidemics may have suggested to my mind, as necessary to prevent its diffusion,” I can only make a brief reply. A different course, with so comprehensive a subject, would require volumes of manuscript, and more time for research than my professional duties will allow.

The history of Cholera, in which I shall include its *progress*, unequivocally traces its *origin* to Asia. It is noticed by HIPPOCRATES, who lived several centuries before the Christian era, and by CELSUS, not many years subsequent to that event. It prevailed in London in 1669 and in 1676, and in Paris in 1730 and in 1780. In 1762, it is said to have destroyed, in

Upper Hindostan, thirty thousand natives and eight hundred Europeans; and from those dates to the present day, it has been, with almost incredible fatality, one of the endemical diseases of India, clearly described by talented and unimpeachable authors.

It was not, however, until 1817, when, with other ravages about the delta of the Ganges, it decimated the army under the command of the Marquis of Hastings, encamped on the banks of the Indus, that the disease assumed a *positively* epidemic form, and thence commenced its fearful *migration* to the East, the South, the West, and the North. To trace its march in the Eastern World, from place to place, and from period to period, as recorded by different writers, would scarcely come within the space allotted to a communication like the present; and I, therefore, shall confine any further observation, to its invasion of this hemisphere, with a short detail of its erratic course while traveling from district to district.

The first appearance of cholera on this continent was in Quebec, Lower Canada, on the 8th of June, 1832; it reached Montreal on the 10th; New York on the 24th;* Albany on the 3d of July; Rochester on the 12th; Troy on the 16th; Flatbush and Gravesend, L. I., on the 15th; Tompkinsville, S. I., on the 17th; States Prison, (Sing Sing,) on the 17th;† Philadelphia on the 5th; Baltimore on the 22d of August, and the city of Washington on the 28th. It also prevailed in the large towns on the river St. Lawrence and its tributary streams. It exhibited itself at Kamarouska, La Prairie, St. Johns, Buffalo, La Chine, Caughnawaga, Coteau de Lac,

* Late in June, the ship *Henry the Fourth* arrived at the Quarantine, having had cholera on board; but I have not been able to procure the particulars, owing to the register having been, for that year mislaid. May not the disease have been derived from that vessel, in lieu of the *Canadas*? And may not the singularity of its appearance in this city, previous to the intervening towns, be thus explained.

† It was also at Hudson Poughkeepsie, and several other places on the North river.

Chatagnay, Cornwell, St. Regis, Prescott, Ogdensburgh, Brookville, Kingston, York, Chambly, Plattsburgh, and Three Rivers. It visited Baltimore, Richmond, Norfolk, Portsmouth, Va., Edenton, Cincinnati, New Orleans, and various portions of the Southern states. At the East a limited number of cases occurred in New Haven, Newport, Providence, Andover, and Boston. To Newport it was unquestionably conveyed from the city of New York.*

During the time thousands were attacked. The average mortality was about fifty per cent., and the general duration of the epidemic, at the various localities, between two and four months. The deaths in this city were three thousand five hundred and thirteen.

In this connection, it is important to note, that the brig Carricks arrived from Europe, on the 3d of June, at the Quarantine ground, Gross Island, thirty-nine miles below Quebec, with the loss at sea of thirty-three, by a disease which subsequent events left little doubt to be the one under consideration.

The first persons taken sick at Quebec and Montreal, were immigrants landed from the steamboat *Voyageur*, which plied between those places, and which was employed to convey persons from immigrant vessels anchored in the river.

In 1833, the disease commenced in February, at Havana and Matanzas, and prevailed for several months, with great severity; the deaths in the former place reached upwards of ten thousand, in a population of about one hundred thousand, including, in the melancholy catalogue, with other distinguished men, the American Consul, WILLIAM SHALER, Esq., and the acting Bishop, PEDRO VALERA Y. XIMENES.

* See official report, page 19, of the Board of Health. New York: Edited by DUDLEY ATKINS, M.D. 1832.

In June and August, it invaded Tampico, Campeachy, Vera Cruz, and the city of Mexico. In Central America, it attacked the army, and destroyed large numbers of the officers and men.

In the United States, at the south, it appeared at Apalachicola and Amelia Island, on the Coast of Florida. At Mobile, Wilcox county, Montgomery, Tuscaloosa, Williamsport, &c., in Alabama. At Vicksburg, Natchez, Clairborne, Jackson, Potage des Sioux, &c., in Mississippi. At New Orleans, St. Martinsville, Thibodeauville, Franklin, Baton Rouge, Alexandria, Contrell, &c., in Louisiana, and at Brazoria, &c., in Texas.

In the Western states, it was at Helena, Little Rock, &c., in Arkansas. At Nashville, Pulaski, Memphis, Simonsville, Shelbyville, Effingham, Beach Grove, &c., in Tennessee. At Maysville, Flemingsburgh, Georgetown, Lawrenceburgh, Lexington, Lancaster, Paris, Blue Licks, Millersburgh, Frankfort, Bardstown, Cynthiana, Greene county, Mount Vernon, Danville, Jacksonville, &c., in Kentucky. At Alton, Carrollton, Quincy, Rushville, Galena, &c., in Illinois. At Williamsport, Salem, &c., Indiana. At Cincinnati, Steubenville, Bridgeport, Belmont county, Zanesville, Jackson, Gallipolis, Senecaville, Chillicothe, Richmond, Fulton, Dayton, Lebanon, Columbus, &c., in Ohio. At Alleghany, Pittsburgh, Brownsville, Claysville, &c., in Pennsylvania; and at Hagerstown, &c., in Maryland. It also appeared at Wheeling, Fredericksburgh, Charleston, &c., in the northern parts of Virginia.

In 1834 it again first visited Quebec and Montreal, and thence spread to the country parishes throughout the course of the St. Lawrence. It prevailed severely at La Chine, Kingston, Prescott, Ogdensburgh, in this state, opposite Prescott; at Toronto, and among the villages on the north

side of Lake Ontario. The village of Galt, U. C., was nearly depopulated. It was very violent at Halifax, N. S., and extended to St. Johns.

In the State of New York, it exhibited itself in the villages on the south side of Lake Erie, at Buffalo, Rochester, Salina, Albany, Poughkeepsie, New York, Brooklyn, L. I., Staten Island, &c. The deaths in the city of New York were nine hundred and seventy-one.

In New Jersey, at Bergen Hill and at Newark. In Pennsylvania, at Williamsport, on the line of the Schuylkill canal, Port Carbon, Beaver, and Washington county. In Maryland, there were a few cases at Baltimore, and three or four in the District of Columbia. In Virginia, at Wheeling, Richmond, and Petersburg. In Ohio, at Cincinnati, Butler county, the Miami country, and the townships of Columbia, Anderson, and Fulton; at Huron, Lower Sandusky, and Cleveland. In Michigan, at Detroit. In Kentucky, at Mills' Point, the mouth of Sandy river, and Princeton. In Mississippi, at Rushton. In Illinois, at Luzerne and Pekin. In Texas, at Austin's and Powers' Colonies; in the towns of Labride and Warlaugh, and as far as the river Lavacca. In Florida, it was at Amelia Island, and at Pensacola, where it was introduced by the United States ship Falmouth. In Georgia, it was at several places on the Savannah and Ogeechee rivers. It also made its appearance at St. Jago, Island of Cuba.

In 1835, in Tennessee, there were cases at Nashville, Murfreesborough, Franklin, north side of Duck river, in the vicinity of Jefferson, and at Williamsport and Memphis; in the neighborhood of Jackson, and at several towns, and on board of the boats on the Ohio and Mississippi rivers. It also continued on the Savannah and Ogeechee rivers, and prevailed to some extent on the Rio Grande.

In 1836, it was at Havana, L. C., and at Charleston, S. C., between which places there was a constant *commercial* intercourse. During the previous years, it had not approached nearer the last named city than Edenton on the north, Savannah river on the south, and Folly Island, off the mouth of the harbor, where it was undeniably attributed to the brig *Amelia*, lost on the 31st October, 1832, bound from New York to New Orleans, and on board of which were cases of the disease. From the wreck, and the passengers with their effects landed from that vessel, it immediately extended to the few negroes inhabiting the island; to the men employed in saving the cargo; to the physicians and nurses sent to attend the sick, and to the city guard, detailed to enforce the Quarantine. The mortality was extreme. It also lingered on the Mississippi, but did not assume an epidemic character.

With the cholera of 1848 and of 1849, every person is familiar. To continue, however, in chronological order the return to our shores of that unrelenting foe to the human race, it becomes necessary to devote a page or more to the sad reminiscences of those years.

On that occasion, the first introduction of the malady was into the port of New York, at the Quarantine ground, Staten Island, by the packet ship *New York*. She sailed from Havre, then healthy, on the 9th of November, with three hundred and eighty-five French and German steerage passengers, twenty-one cabin, and a crew of thirty men. According to the statement of the commander, Captain LINES, all hands remained well until the sixteenth day, lat. 42°, long. 61°, Sable Island bearing about one hundred and forty miles, S.S.W., when, after a *general overhauling of chests* for warm clothing, in consequence of the coldness of the weather, the first cases occurred. At the date of arrival, Friday night, December 1st, seven of the between-deck passengers had been buried at sea; and on the 2d and 3d, eleven were landed

sick at the lazaretto, and put in the hospitals on the hill. Seven of them died, and the remainder, in apparent health, were ordered on shore, and were lodged in the "Public Stores," belonging to the United States. From those buildings the disease spread to the hospitals, and prevailed in both until the 28th of the month. In that time, upwards of one hundred were attacked. The mortality was about one-half. It was alleged, and probably with truth, that several of the passengers were indirectly from Bremen, where cholera prevailed.

In April it reappeared at the stores, and in May in the hospitals. From the 18th of April to the 15th of August, there were one hundred and ten deaths. During that period, forty-one persons with cholera, were received from the shipping. Several deaths, also occurred on different parts of the island.

In the early part of December, there were two cases in New York. One was an individual from the Quarantine; the other subsequently occupied the same room in the boarding-house. Both were fatal.

With those known exceptions, the first individuals taken sick were attacked on the 11th of May, 1849, in Orange street.* They were the lowest and vilest caste of street-wanderers and dock-pilferers,† and the occupants of dilapidated underground basements on the same premises. From that period, the malady gradually pervaded the city, and continued with more or less intensity, until the last of Sept.‡

* Adjacent to the "Five Points."

† It would be absurd to suppose that those cases were the cause of an *epidemic*.

‡ Until late in November, numerous cases continued to be received into the Hospital on Staten Island, from vessels arriving from various ports in Europe. See official report to His Excellency, Governor FISH, by F. CAMPBELL STEWART, M.D., 1850, which says, with other details—"after the Board of Health discontinued their daily reports," "one hundred and seventy-eight cases of cholera and cholerae were admitted from twenty-six vessels, which had lost, in the aggregate, at sea, three hundred and forty-eight of their passengers, most of whom are presumed to have died of the same disease."

The number of deaths was five thousand one hundred and sixty-one. The nearest vicinity of the pestilence was Staten Island, between which and New York there was constant intercourse by the residents of each place; and, in most instances, the well passengers from sickly vessels, owing to the absence of sufficient accommodation at the Quarantine ground, were permitted to disembark at the wharves with their un-ventilated baggage. If the infection were not ascribable to those sources, it could not be traced to any other.*

In Brooklyn, L. I., it manifested itself about the 26th of May. In Williamsburgh, L. I., on the 29th. In Jamaica, L. I., on the 4th of June, and about the same period at Bergen and Newark, N. J.

It prevailed at Albany and Troy, on the line of the Erie Canal, and at Buffalo. In Montreal the deaths were four hundred and ninety-nine; in Quebec, to the 23d of August, nine hundred and forty-three, and in Toronto, to the 9th of the same month, three hundred and eighty-four.

At Boston, Mass., the bark Argyle arrived on the 4th of June, from Scotland, with cholera on board, and cases are said to have occurred in that city from that time. From the 22d of June to the 13th of October, however, the deaths were six hundred and two. In several other cities and villages of New England the disease prevailed.

In Philadelphia, eight cases were announced on the 22d of May. The number of deaths, accurately reported, from the 26th of May to the 22d of September, was one thousand and twenty-two.

In Baltimore, it was reported on the 22d; in Norfolk, Va.,

* Common Sense pointed to the Quarantine ground, less than six miles from the city, for the denotation of the poison.

on the 29th, and in Richmond, Va., on the 30th of May, the Legislature of which adjourned to Fauquier Springs.

At New Orleans, as at Staten Island, the cholera appeared in December, and under similar circumstances. The first two cases sent to the Charity Hospital, were from the ship Swanton from Havre, on board of which the disease manifested itself when about two weeks from port. Thirteen bodies had been thrown overboard. Her passengers were, also, composed of French and Germans, and the latter were recently from their own country. From that vessel it spread to the shipping, to the river boats, and over the city. The number of deaths, from the 11th of December to the 7th of February, was nearly twelve hundred, when the Board of Health pronounced the epidemic at an end, and ceased to report.

The disease visited Vicksburgh, Cincinnati, and several other places. On the 8th of January it was at Memphis, and on the 17th at St. Louis. It also appeared at Mobile, and, in a severe form, in Texas. At Fort Lawson, forty deaths occurred in one night among the troops.

Subsequently, the malady resumed its fearful strides in New Orleans and in Cincinnati, and continued for several months. It prevailed throughout the Valley of the Mississippi with great havoc on the plantations, and extended itself to Indiana and Illinois. At St. Louis, its duration and violence were unsurpassed on this continent; and in Texas it raged with unabated and destructive fury.

Numbered with the lamented dead, were the chivalrous WORTH, the brave DUNCAN, the gallant YATES, and the veteran GAINES. Invulnerable to the balls of an enemy, when leading their victorious columns on the field of battle, they were suddenly and remorselessly stricken to the earth while re-

ceiving the plaudits of a grateful country. A nation's tears bedewed their graves.

At present, it is on Ward's Island—the home for destitute invalid and sick immigrants.* The proximity of that institution to the city of New York, *the occurrence of cholera in this country with the presence of it in Europe*, and its probable spread from those sources, demand the prompt adoption of every available means to prevent so serious a catastrophe. It has, also, commenced its march in Louisiana, and will, doubtless, again overrun the Valley of the Mississippi, and the shores of the Ohio.†

* The first case occurred on the 31st of January, and came to the island direct from the ship *Vandalia*, from Liverpool. The subsequent mortality was about fifty.

† A few days after the above was written, the disease ceased on Ward's Island, without extending to the adjacent shores. During the year, (1850,) it prevailed among the immigrants on the Mississippi; at New Orleans, Baton Rouge, Donaldsville, Point Coupee, &c., in Louisiana; at Chicot county, and on several plantations, in Arkansas; at Memphis, Gainsborough, Nashville, &c., in Tennessee; at Covington, Newcastle, Eminence, Louisville, Shelbyville, Drennon, Rock Spring Mills, &c., in Kentucky; at Columbus, Circleville, on the river boats, in the vicinity of Carthage, New Olin, Warren county, village of Mason, Mainville, Cincinnati, Esculapia, Lancaster, Zanesville, Ploua, St. Mary, Hamilton, &c., in Ohio; at Worthington, Petersburg, on the canal, Florence, Madison, Cannelton, Corydon, Evansville, &c., in Indiana; at Chicago, Kaskaskia, Galena, and among the troops on the river, in Illinois; at St. Louis, Liberty, and several points on the river, in Missouri; at Burlington, Boon township, village of Mount Sterling, &c., in Iowa; at Frankville, Wingville, Milwaukie, Dodgeville, &c., in Wisconsin; and at Pittsburgh, in Pennsylvania.

It was, also, among the Choctaw Indians at Fort Coffee; among the emigrants at Fort Kearney and on the Plains.

In California, it was at St. Jose, San Francisco, and Sacramento City. At San Francisco, it appeared immediately after the arrival of the steamer *Caroline*, on board of which several persons were sick, and several died with the disease.

In Mexico, it was in the Capital, at Puebla, in Acapulco, and Panama. On the Island of Cuba, at Havana, Sagua La Grande, and Matanzas. At Jamaica, it was at Kingston, and many other parts of the Island.

Within the last seven months, (1851,) it was at New Orleans, and on board many of the steamboats, from there, on the western rivers, and at the different landings. In Arkansas, at Fort Smith, and at Sulphur Springs, not very distant from it. In Tennessee, at Nashville, Franklin, Memphis, &c. In Kentucky, at Brandenburg, Princeton, Paduca, Louisville, Versailles, Cynthiana, Grassy Creek, &c. In Missouri, at the village of Cottleville, St. Charles county, at St. Louis, Lexington, Hannibal, Jefferson City, Jefferson Barracks, &c. In Illinois, in the city and county of Jersey, at Springfield, Galena, Belleville, and Quincy, in the Penitentiary at Alton, at Monmouth, Carthage, Bethel, Pisgah, Lewiston, Astoria, Rushville, Peoria, Fannington, Savannah, Chicago, &c. In Iowa, at Mount Pleasant and its vicinity, at Keokuk, West Point, Fort Madison, Davenport, &c. In Wisconsin, at Madison, &c. In Indiana, on the canal, near Petersburg, and in the neighborhood of that place, at Salem, Port Royal, La Grange, Bloomington, Bremen, &c. In Ohio, at Shelby, West Union, Cincinnati, &c. In the Indian country, among the troops at Fort Laramie. In the Missouri Territory, along the Yellow Stone river, at Fort St. Pierre, and on the Plains, near Fort Leavenworth.

In Quebec, L. C., there were upwards of two hundred deaths during the months of August and

The *cause* that produces cholera is not known. By some it is thought to be atmospheric; by others meteoric—telluric—electric—animalcular. To reiterate the speculations on the subject, would be more curious than useful. Each writer has imagined the premise from which the fact is assumed, and the conjectured fact has invariably been made to conform to the fancied premise. That it is a *specific poison*, it would be difficult to confute. Its effects on the human system, unlike any thing else ever beheld, seem conclusive evidence of the correctness of the supposition.

The *treatment* of cholera has been as various as the conceptions of medical men on the nature of the disease. More obscure than any other malady presented to the consideration of the profession, physicians seem to have framed their ideas agreeably to the hypothesis derived from their opportunity to investigate, and their ability to judge. As one of the number, I pursued the same course; and, while I can with propriety avoid any reference to the views of others, I cannot well refuse, on such an occasion, to furnish you with the conclusions I reached, based on experience at the bedside, during the epidemics, in this city, of 1832, 1834, and 1849, although more adapted to the columns of a medical journal, if intended for publication.

September; and on the island of Jamaica, it was at Savannah La Mar, and at the parishes of Westmoreland, Green Island, and Hanover. On the island of Cuba, at Havana, &c. In Mexico, at Sonora, and in the States of Sinaloa, Jalisco, Mazatlan, &c.

During the year 1852, the malady invaded Quebec, L. C.; Buffalo, Rochester, and New York, in the State of New York; Mifflin and Chambersburg, in Pennsylvania; Wheeling, in Virginia; Cleveland, Sandusky, Wilmington, and Cincinnati, in Ohio; Fort Wayne, and Harrodsburg, in Indiana; Detroit, in Michigan; Covington, Lexington, Maysville, Princeton, Millersburg, Fairfield, Hopkinsville, Knoxville, and the counties of Owen, Grant, and Bourbon, in Kentucky; Chicago, La Salle, Springfield, and along the river Illinois, in Illinois; Shebogan, in Wisconsin; Dubuque, in Iowa; Jackson, Scott's County, and New Metta, in Missouri; Memphis, in Tennessee; Canton and Foote County, in Mississippi; New Orleans, in Louisiana; Caro, and several other places on the river Mississippi; Apalachicola, in Florida; Indianola, Victoria, and the vicinity of the river Lavacca, in Texas; Fort Leavenworth and Laramie, in the Indian Territory; and the Plains.

The disease, also, prevailed at Mazatlan, Acapulco, Panama, and Cruces, in Mexico; at Cambridge, Montego Bay, Green Island, and at other localities, on the island of Jamaica; at Havana, and elsewhere, on the island of Cuba; at the Bahama Islands; at Nassau, New Providence; and at Harbor Island.

In my opinion, many of the phenomena, and the immediate causes of death in cholera, are to be attributed to the *disintegrated* condition of the blood, from the direct loss of serum, poured out by the capillary vessels into the alimentary canal, and subsequently ejected, in most instances, from the body. Chemical analysis of the discharges has abundantly established the fact, and saline injections into the veins, by their instantaneous effects on the circulation, have synthetically confirmed the truth of the proposition. The first indication, therefore, is to suppress the loss of that fluid, in order to retain, as long as possible, sufficient vital energy for the action of other remedies. For this purpose, astringents are the only agents. Various have been recommended, and I have fairly tested the efficacy of each. To the vegetable combinations I gave a decided preference, and from a solution of tannin, in liberal doses, I derived the most satisfactory results.*

Next, and equal in importance, is the necessity of inciting the liver to action, as speedily as it can be accomplished, by the administration of cathartic medicines. With me, calomel, blended with powdered opium and camphor, in medium quantities, and in the form of pill, succeeded the best.†

After a fair trial of many others, in those remedies I placed the utmost reliance. If rejected, *they were repeated*,‡ for when retained by the stomach, and bilious evacuations were obtained from the bowels, little remained to be achieved, in most instances, but to guard against relapse, by *cautious*

* Ice, so generally used, produces similar effects. Independent of partially alleviating the intolerable thirst, and *gradually* furnishing the system with water, its temperature contracts the muscular tissue of the prime viæ, and closes, in proportionate degree, the mouths of the secerning vessels.

† Calomel, when administered in the form of pill, owing to its greater specific gravity, is apt to sink in the contents of the stomach, and consequently be retained. In this respect, it is superior to any other agent.

‡ To inattention to this important point at the bed-side, more than to any other cause, is the great fatality of cholera to be attributed. In many instances, the remedy is scarcely swallowed before it is unobservedly ejected, and the patient virtually dies without any treatment whatever. The most favorable time for taking medicine of any kind, is immediately after vomiting, when the stomach is empty.

diet, during the period of convalescence. When fever supervened, it was treated in accordance with its type, and with the condition and habits of the patient.

External applications I regard as mere auxiliaries. As such, they are of some importance, but intrinsically of little value. For profuse perspiration, no agent equalled, in my practice, the free application of water in India rubber bags, cold enough to corrugate the skin; and for cramps, none exceeded the use of tourniquets without the pads, sufficiently tight to interrupt the *superficial venous* circulation in the limbs.

Iced "Congress Spring" water, in small quantities is a grateful drink during convalescence, and valuable for its saline and alkaline properties.

The above remarks, it must be understood, are applicable to cholera when it presents unmistakeable evidence of its existence, by the *greater* or *less* alteration of the countenance; the clammy moisture of the skin; the slowness and feebleness of the pulse; the huskiness of the voice; the coldness of the tongue; the corrugation and lividness of the hands and feet; the spasmodic action of the muscles of the abdomen and extremities, and the "rice-water" discharges from the stomach and bowels.

In the early and less marked stage, with simple relaxation of the bowels, and considerable lassitude, a mixture, in teaspoonful doses for an adult, repeated as frequently as circumstances demand, composed of laudanum, spirits of camphor, tincture of kino, spirits of hartshorn, tincture of capsicum, essence of cloves and peppermint, syrup of ginger, and water, followed by calomel, if necessary, is all that is required in a large majority of cases, to put a speedy termination to the attack.

At the several times that the "Health Laws" of the State underwent revision by the Legislature, no reference was had to cholera, unless in 1832, when a special act was passed to meet the occasion, which expired by its own limitation with the year 1833.

On reading over, however, the law as it *appears* to stand, for it is difficult to say what portions have been repealed by the transfer of the "Marine Hospital" to the "Commissioners of Emigration," it seems to me that the alteration of a few words, and the introduction of a few sections, are all that is essential to render it more protective without being additionally oppressive.

With this view, and with all the hesitation involved in so delicate a procedure, I have marked in the annexed copy of the statute, as published by the Commissioners of Health, in 1846, the amendments I suggest.*

To those who examine the various sections for the first time, they will doubtless appear to confer power on individuals at variance with the spirit of republican governments; but when the despotism of law is measured by *the despotism of disease*, and the strength of the one is contrasted with the weakness of the other, it will be conceded that personal considerations are of minor importance, when placed in comparison with the inestimable blessings of health.

* They were adopted; and I now advise the repeal of any section, authorizing the transfer of immigrants to the Marine Hospital, after their arrival in this city; for the privilege had no other effect than to *prevent* the object of a Quarantine, and to *devote* the beds in the Hospitals to persons whose lives become endangered by admission to the institution. According to the statistics of 1848, from April 23d to December 31st, inclusive, upwards of one thousand one hundred in two thousand five hundred and twenty cases, were recorded on the books with maladies, that *did not* come within the usually accepted designation of "malignant, contagious, or pestilential diseases." Aside from the cruelty of forcing scores of defenceless human beings into a position where even a majority of physicians both sicken and die, humanity revolts at diminishing the chances of recovery, by excess of numbers, of those who are *compelled* to submit to the exactions of the law of the state. That they were all taken from vessels by the Health Officer, no medical man can believe; and, therefore, a large proportion must have been sent from elsewhere without much regard to their *ultimate fate*. Hereafter, the establishment should be limited to the reception of individuals, from ship-board, and to those who become ill, after arrival, at the Sanitary Refuge, proposed in a note, at page 68.

I, also, advise the *separation* of the Quarantine from the institution provided for the protection of immigrants. Between an establishment for the care of individuals in health, and for the treatment of ailments harmless to others, and a lazaretto for the reception and detention of persons with pestilential and contagious maladies that endanger the lives of a community, it is difficult to discover any affinity, or to assign any reason why the connection should exist. Singular as it may appear, the Board of Health have now the control over the local sanitary laws of the county, with the exception of the important appointment of Health Wardens, who are selected by the *Chief of Police*,* while the Commissioners of Emigration have possession of the hospitals and grounds on Staten Island, whence a portion of the security of the city of New York, from imported disease, is to be derived. With such an extraordinary admixture of departments and divisions of powers and responsibilities, the result, it seems to me, cannot fail, sooner or later, to be disastrous in its consequences to the public.

In my judgment, the Marine Hospital, in order to fulfil the intention of its creation, should be—as the wise heads and pure hearts, governed by the experience of years, originally made it—a direct unincumbered branch of the Medical Police of the State, under the immediate jurisdiction of the authorities of the city, and the Commissioners of Health, who are alone competent, by qualification and position, to meet the exigencies that momentarily arise. How to accomplish that object, in accordance with the decisions of the Supreme Court of the United States, it is the province of a lawyer, not of a physician, to explain.

The outcry heretofore raised in relation to economy, or

* The "City Inspector," who is a physician, has now the appointment of "Health Wardens," with the advice and consent of the Board of Aldermen. They were properly placed under his supervision and control. And the Physician (in Chief) has, by the Act of 1883, the selection of the assistant physicians, as well as the appointment of the orderlies and nurses of the Hospital.

rather, whether Epsom salt may be purchased for one or two cents an ounce, never can be worth the notice of enlightened statesmen, especially on occasions when the preservation of the health of thousands of citizens is under consideration.

Before leaving this branch of the subject, I deem it a duty to recommend the removal of the institution from its present location to a more distant site, if one can be procured that shall afford *a harbor for the secure anchorage of vessels*, and sufficient accommodation *for the safe detention and purification of passengers and their baggage*, when circumstances demand it. With any other disease than ship-fever,* this, perhaps, would not be immediately necessary; but if the population of Staten Island—its proximity to the city—the constant unavoidable commingling of the inhabitants with each other—the vast increase of emigration—the impossibility of enforcing a rigid hospital police under such circumstances—the gross imposition of continuing a nuisance in a densely settled locality—the danger incurred by those who reside in the immediate vicinity of the establishment, and the facility and rapidity with which a virus is conveyed, from place to place, are taken into consideration, the conclusion is self-evident, that much greater comfort and security must arise from a more isolated, more extensive, and better ventilated position.†

* The protection of the city and country from the introduction of this highly *contagious* malady, immediately demands the erection of buildings in the *vicinity* of the Quarantine ground, adapted to the reception of steerage passengers, apparently in health; and imperatively requires the enactment of a law, prohibiting them from leaving the premises, until ample time has elapsed, to enable them to recover from the effects of the privations and fatigues of the voyage—to cleanse and purify their persons—to wash and ventilate their clothing and baggage—and to *mature and develop concealed symptoms of the disease*. Besides, it would, under proper management, not only greatly disembarass the Commissioners of Emigration; but be of incalculable benefit to immigrants, by enabling them to ensure arrangements for a direct embarkation to their ultimate destination, and thereby avoid the piracies daily practised on them in New York.

† Next to the present location, the only proper site is at Sandy Hook; but as it is within the territorial limits of New Jersey, whose authorities refuse to cede any portion of it to the State of New York, the only practical alternative is to continue the anchorage where it is, and transfer the *Hospitals* to a more suitable place. By pursuing this course, most of the essential objections would be removed, and every sanitary purpose be achieved.

When that is done, and the law, as amended in 1846 with trifling alterations, is restored to the statute-book, and *published in one act that it may be understood*, all probably will have been *practically* obtained, by the authorities of the State, that is within the power of the wisest legislation to devise, short of non-intercourse with infected countries, divided by seas of thousands of miles in extent.

The *preventive* measures adopted against the invasion of cholera, have been various. Governed, nevertheless, by special though inscrutable laws of its own, the triumphant march of the disease over valleys, mountains, and oceans, *regardless of climate or of wind*, has *hitherto* bid defiance to every agent instituted for its restraint by the combined wisdom of mankind. That it, however, is *indigenous* to the Indian Peninsula, no one can dispute; and that it *radiated* from that point over the habitable globe, few will deny. Be the cause that produces it, therefore, what it may, there cannot be a doubt that it is *transmittable*, from hamlet to village, from town to city, from country to country, and from continent to continent. Take, for example, the invasion of Quebec and Folly Island, in 1832, and who will question that the miasm emanated from the brigs Carracks and Amelia, and the infected clothing and baggage of their passengers and crews? Look at the ship New York, at Staten Island, in 1848, and who will seek any other source to explain whence the pest was derived? Remember the ship Swanton, in the same month and year, at New Orleans; the bark Argyle, at Boston, in 1849, and the countless steamers on the northern and western rivers, and what additional proof can be required to establish that from those nuclei the *materies morbi* was disseminated in North America, dealing misfortune and death from one extremity to the other?

And why should it not be so? Will not air, impregnated with a morbid agent, possess the same power relatively,

and produce the same effect proportionally, when liberated from cavities in vessels, as at the port from which they sail? Does it not occur with yellow fever, and is not the recorded evidence of it at the lazaretto of this city, too positive to require either argument or dispute. Let those, then, who prate of "mere coincidence,"—"Pandora's box,"—"needless restrictions on commerce," and "love for antiquated ideas," continue to gratify their vanity by the expression of their opinions, and amuse the reader by the publication of their views; the experience of years fully demonstrates the value of severe prohibitory laws, and strongly inculcates the prompt enactment of every measure, that, even remotely, tends to the accomplishment of a salutary effect.

Admit that the most strenuous and best directed energies at times fail, the satisfaction of having made the attempt to protect the health of others, at least remains, and must be a source of grateful recollection to every individual, who endeavors to contribute to an object which decreases the peril and improves the condition of mankind.

It has been observed, that cholera *selected* the vitiated and depraved members of society, and sought its victims in low grounds and filthy localities. However correct this statement may appear, it is very questionable, if the result was not attributable to their larger relative number, owing to their inability to leave the city, and their gross neglect, until too late, to avail themselves of medical advice. If impaired health, personal degradation, crowded dwellings, abject penury, and an atmosphere surcharged with animal and vegetable decomposition, were the only requisites necessary to produce the disease, the absence of it, from the years 1834 to 1849, could not have occurred in the city of New York, especially in the "Five Points." An interval of *fifteen years*, under precisely the same circumstances, in that

den of misery and debauchery, surely requires some other explanation to account for the presence or absence of the malady.*

Unfortunately, however, it is not restricted in its career, nor exclusive in its choice. Next to Omnipotence in power, it enters the door of the opulent, as well as of the indigent, and insatiably hurls into the grave the good and the virtuous, the amiable and the gentle, the irreproachable infant, and the discreet of mature years, notwithstanding the profusion of means, the devotion of friends, the care of affectionate relations, and the talent of eminent physicians.

Formidable, nevertheless, as the sorrowful record of mortality has shown the disease to be, it becomes so, in most instances, from inattention to the primary symptom. Almost invariably preceded by *ordinary diarrhœa*, it *only* gathers strength and power by the hesitation, doubt, and carelessness of those who receive, if disregarded, *the deadly admonition*.

- It is true, a severely deranged condition of the digestive organs may arise from sources totally unconnected with Cholera Asiatica; but that it would be dangerous, *during the prevalence of it*, to rely on so uncertain a result, when the loss of *one hour* in the treatment might prove destructive of life, is equally true. The only safe course, therefore, to be pursued with a malady of such rapidity and violence, is to promptly meet, in a comparatively harmless stage, the *first indication of its approach*, without the smallest reference to similar initiatory symptoms in other diseases.

* And for the commencement of the epidemic there in 1848.

That the malignity of the disease may be mitigated, by judicious local regulations, etc., cannot be contradicted. To accomplish that object, the most reliable means are the restriction of all establishments in which the manufacture and repackage of articles are found to be detrimental to health, to safe distances from the city; the purification of the streets, yards, privies, gutters, and sewers, by the removal of all offensive matter to remote situations; the free use of water and disinfecting materials; cleanliness of person; strict precaution against transitions from heat to cold; regularity in mode of living; avoidance of indigestible food, and excess in the use of malt or alcoholic drinks; due regard to change of clothing with alternations of weather; pecuniary and other aid to the indigent; the organization of hospitals for the speedy reception of the sick, and of dispensaries for prompt advice, and gratuitous distribution of medicines; the timely appointment of *capable* ward physicians to visit those who are unable to pay for professional services, and an admonition to the public to discard all nostrums, and reject all preventive remedies.

With ordinary attention to these recommendations, the predisposition to the malady may be allayed, and the violence of its assaults subdued; but, in the practice of them, it is equally necessary to avoid sudden and decided changes in the habits of individuals, for no fact can be better established than the injurious tendency of severe shocks to the nervous system during the prevalence of an epidemic, and no greater exciting cause can be alleged for the attack of thousands, who might otherwise escape.

Interment of the dead in *deep* graves is preferable to vaults. The dissolution of the body under ground, is far less objectionable than in tombs, the air of which, when opened from time to time, is diffused through the atmosphere, and

cannot fail to have a deleterious effect on those within its influence.

Whether cholera is *contagious*, if personal communicability of the disease be meant by the word, time alone can disclose. My observation has been confined to localities where every person was subjected to the impression of the *cause*, irrespective of *contact* with those who were sick; for me, therefore, to express an opinion on a doubtful point, when it was impossible to designate the source from which the malady was derived, would be to place myself in the *conjectural* school, with but little claim to the correctness of my views.

In closing these remarks, sir, I avail myself of the opportunity to say, that I sincerely hope that others, with far greater knowledge, may point out more positive and effective measures to protect the citizens of this, otherwise healthy and prosperous, country from the devastation of a scourge—the terrific offspring of a far distant land.

I have the honor to remain, Sir,

Your obedient servant,

ALEX'R F. VACHE.

To the Hon. C. D. ROBINSON,

*Chairman of the Standing Committee
of Medical Societies and Colleges in Senate, Albany.*

APPENDIX.

CORRELATIVE CORRESPONDENCE.

MARINE HOSPITAL, QUARANTINE,
Staten Island, Dec. 15, 1853.

MY DEAR DOCTOR: Your favor of the 2d was duly received, and I am confident, that the wise example of the physicians of Charleston, will result, if adopted elsewhere, in the protection of every sea-port city in the United States, from the introduction of yellow fever. Bold as the expression of my opinion may seem, I am convinced that the virus is conveyed even to Havana, by vessels from the coast of Africa, and thence transmitted wherever there is commercial intercourse. Who ever heard of the disease originating a mile or two inland from the ports of Cuba? The assertion would be a libel on the salubrity of that beautiful ocean bound island.

Chlorine seems to be the principal agent depended on here for disinfecting shipping; besides which, the decks are swept down, washed, and swabbed, and chloride of lime is distributed freely in every direction.

The law contemplates the landing of merchandise at the Quarantine, for the reception of which, the United States Government erected large stores; but since the institution has been converted into a kind of emigrant hospital, the plan adopted is, to lighten the vessel, when deemed necessary, by steam tugs; leaving to the authorities of the city the duty to order the cargo where they think safe. Those who pursue the business take their chance, and every now and then, one falls a victim to the malady.

I send you copies of laws, by the express, antecedent to those in my book. You will find the one an amendment to the other, and that all are requisite to a perfect whole.

The large increase of commerce and emigration to New York, rendered it necessary to relieve the Health Officer from a portion of his duties, and the Legislature re-passed a law appointing a Physician, (in chief,) to take exclusive charge of the hospital, &c. The Governor kindly tendered the position to me. Thus I am once more "in the saddle," and I must say, with rather a pestiferous re-initiation—first yellow fever, then cholera, and the usual quantity of typhus and small-pox. From the 29th July to 29th October, about twenty vessels, principally from New Orleans, Mobile, and Havana, anchored at the Quarantine with yellow fever on board. Sixteen persons died at sea, and forty-four were received in the hospital, exclusive of convalescents. Where would New York have been, think you, if these floating pest-houses had proceeded direct to the city? As it was, four or five of the residents of the Island died with the black vomit. With cholera there were forty, mainly from Liverpool, London, Bremen, and Hamburg; the deaths on the passage were about sixteen hundred, and nearly four hundred cases were sent on shore.

All the passengers in apparent health, between eighteen and nineteen thousand, were landed and individually inspected, their baggage well ventilated on the extreme end of the wharf, and they were subjected to a detention of forty-eight hours, with a view to give time to the disease to exhibit itself. Strange as it may appear, although several were attacked at the Lazaretto, only two from the number were taken sick after reaching New York.—I must not, however, omit to state that the malady spread with great fatality on two occasions to the other patients, especially those convalescing from yellow and typhus fevers, and small-pox.

I may re-print my little volume, as I intend to press the amendments, mentioned in the notes, on the Legislature this winter, and I desire to let the members see the reason why they are required. A very small edition was originally published with the same view, which was immediately exhausted by those interested in the subject. I shall re-write, not correct as before, several paragraphs, and render them more clear.

If it is in my power to aid you, in the establishment and dissemination of the great truth—the importation of disease—all the information I possess is at your disposal.

With great respect and regard, amidst many interruptions in the office, and the arrival of more cholera ships in the stream, I remain truly yours,

ALEX'R. F. VACHE.

To Prof. S. H. DICKSON, M.D., }
Charleston, S. C. }

MARINE HOSPITAL,

Staten Island, Jan. 17th, 1854.

DEAR SIR:—The letter which you read in the *Charleston Courier*, was written, *currente calamo*, to a personal friend; and, was not intended for publication. I am glad, however, of the opportunity to answer, *in detail*, any questions to which it may give rise.

The deaths, about which you inquire, on Staten Island, occurred when several infected vessels, from New Orleans, &c., were at anchor in the roadstead, prescribed by law. One, was that of a Stevedore, who had slept on board of the bark, Asa Fish; two, were revenue bargemen, whose duty it was to convey the boarding officer, of the Customs, to the shipping in the stream, and, the remainder, consisted of a man and his wife, who resided in the village, but suspected of surreptitious contact with either bedding or clothing from

a contaminated source. All, were marked cases of *vomito*, and no one here questioned the foreign derivation of the poison.

As an advocate of the importation of yellow fever, I am gratified to learn, that the recent epidemics have aroused many of the physicians of the *South*, to the investigation of measures for the better protection of their ports, from the invasion of the disease; and I earnestly hope, that they will not be deterred from the promulgation of their views, by the bitter opposition they will receive from the members of the profession, who have, heretofore, staked their reputations on the accuracy of the *endemic* hypothesis, nor by the violent hostility they will encounter from the mercantile community, on the least approach to an innovation, which *appears* to conflict with the established interest of their commercial relations. Let the *pioneers*, in so good a cause, fearlessly give to the public, the indisputable evidence of the beneficial results of the sanitary codes of the *North*; let them, triumphantly, point to the exclusion of the malady from the city of New York, by restrictive means, for the last *thirty-one years*; let them, clearly, demonstrate to the civil authorities, that the *plague*, which, periodically, sends thousands to a premature grave, *is not*, as alleged, *indigenous* to the soil; let them delineate, in the overwhelming language of truth, the untold happiness and prosperity to flow from *a system*, which would assuredly prevent the annual flight of their citizens from their business and *their homes*—and I am confident that the day is not far distant, when, by the enactment of a *judicious Quarantine*, this mighty republic will be protected against the *introduction* of a pest, to as unlimited an extent, as the predestined leagues of its shores.

With pleasure, I remain,

Your obedient servant,

ALEX'R. F. VACHÉ.

To J. C. NOTT, M.D., Mobile, Ala.

AN ACT
RELATIVE TO THE PUBLIC HEALTH
OF THE
CITY OF NEW YORK.

PASSED APRIL 10, 1850, "THREE-FIFTHS BEING PRESENT."

*The People of the State of New York, represented in Senate
and Assembly, do enact as follows :*

TITLE I.

OF THE OFFICERS OF THE PUBLIC HEALTH IN THE CITY OF NEW YORK.

§ 1. The legislative powers heretofore vested, by any existing law of this state, in the Board of Health of the city of New York, other than as the same are hereinafter modified or altered, shall be vested in the Mayor and Common Council of the said city of New York.

§ 2. The said Mayor and Common Council, when acting in relation to the public health of said city, or in the execution of the said powers, or of those hereinafter conferred, shall be known as the Board of Health of the city of New York, of which ten members shall be necessary to constitute a quorum. The Mayor shall be the President of such Board, and shall have power at any time to convene the same.*

* From the wording of the last sentence of this paragraph, it is doubtful if the Board of Health can meet, however great the emergency, without the sanction of the Mayor; and, therefore, it should be made to read, after the word "Board," "and shall convene the same on the requisition of five members, and at such other times as he may deem requisite."—A. F. V.

§ 3. The sessions of the Common Council, when acting as a Board of Health, shall be with closed doors, except when otherwise ordered by said Board.

§ 4. The President of the Board of Aldermen, the President of the Board of Assistant Aldermen, the Health Officer, the Resident Physician, the Health Commissioner, and City Inspector, shall be the Commissioners of Health.

§ 5. It shall be the duty of the Mayor and the Commissioners of Health to render their advice to the Board of Health, and to the City Inspector of said city, in regard to all matters connected with the public health thereof.

§ 6. The Health Officer shall perform all the duties hereinafter specified, and such other duties as the Board of Health, or the Mayor and the Commissioners of Health shall lawfully require.

§ 7. The Health Officer may appoint an assistant, for whose conduct he shall be responsible, and who may perform all the duties required of the Health Officer. Such assistant shall, before entering on the duties of his office, take the oath prescribed in the Constitution of this state.

§ 8. The Resident Physician shall visit all sick persons reported to the Board, or to the Mayor, and the Commissioners of Health, and shall perform such other professional duties as the Board of Health shall enjoin.

§ 9. The Health Commissioner, under the direction of the Board of Health, shall assist the Resident Physician in the discharge of his official duties.

§ 10. In the discharge of their duties, the Mayor and the Commissioners of Health shall meet daily at the office of the

Board of Health, during such part of the year, and at such hours of the day as the said Board shall designate.

§ 11. The Resident Physician shall receive an annual salary of twelve hundred and fifty dollars, to be paid by the Corporation of said city, and the Health Commissioner an annual salary of three thousand and five hundred dollars, in lieu of fees and per centage; which shall be paid by the Commissioners of Emigration, and after the expiration of the term of office of the present Health Commissioner and Resident Physician, the said officers shall thereafter be appointed by the Mayor of the City of New York, by and with the advice and consent of the Board of Aldermen of said city.*

§ 12. The Board of Health may, from time to time, appoint so many visiting, hospital and consulting physicians, as they may deem necessary, designate their duties, and fix their compensation.

§ 13. The Mayor, by and with the advice and consent of the Board of Aldermen, may appoint an Inspector of vessels, who shall, under the direction of the Mayor and the Commissioners of Health, or of the Board of Health, perform the duties required of him in this Act, and shall be entitled to receive the following fees:

For each cargo inspected by him, under such direction, three dollars.

* As no State can levy a tax on commerce for revenue, the Health Officer is, necessarily, compensated for his services by fees, which are charged to the account of the vessel. Although the aggregate amount may appear large, the responsibility, and the labor and danger of the office, fully justify the receipt of it, especially, when it is remembered that a professional man abandons his practice for the appointment—that he is compelled to pay heavy salaries to his assistant and boatmen—that his residence is in the midst of a pestilential atmosphere, and that he momentarily perils his life in the performance of his duty. The records of the Board of Health, from the organization of the Institution to the year 1822, exhibit the decease of five Health Officers; since which time there has, fortunately, been but one death, that of the lamented Dr. A. SIDNEY DOANE, although nearly all of them have contracted diseases incident to the establishment.—A. F. V.

For each vessel cleansed and purified by him, under the like direction, five dollars.

Which fees shall be paid by the owner or consignee of the cargo inspected, or vessel cleansed and purified.

§ 14. It shall be the duty of such Inspector after he shall have performed any service required of him to make an immediate report of his proceedings and their result, to the Board of Health, or to the Mayor and the Commissioners of Health.

TITLE II.

OF QUARANTINE AND REGULATIONS IN THE NATURE OF QUARANTINE,
AT THE PORT OF NEW YORK.

ARTICLE I.

OF THE PLACE OF QUARANTINE AND THE VESSELS AND PERSONS
SUBJECT THERETO.

§ 1. The anchorage ground for vessels at Quarantine shall be near the place where the Marine Hospital now is, and shall be designated by buoys, to be anchored under the direction of the Health Officer; and every vessel subject to Quarantine shall, immediately on her arrival, anchor within them, and there remain, with all persons arriving in her, subject to the examinations and regulations imposed by law.

§ 2. Vessels arriving at the port of New York, shall be subject to Quarantine as follows:

1. All vessels direct from any place where pestilential, contagious or infectious disease existed at the time of

their departure, or which shall have arrived at any such place, and proceeded thence to New York, or on board of which, during the voyage, any case of such disease shall have occurred, arriving between the thirty-first day of May and the first day of October, shall remain at Quarantine for at least thirty days after their arrival and at least twenty days after their cargo shall have been discharged,* and shall perform such further Quarantine, as the Mayor and the Commissioners of Health may prescribe.

2. All vessels embraced in the foregoing subdivision, arriving between the first day of April and the first day of November, exclusive of the time in said subdivision mentioned—all vessels from a foreign port, on board of which, during the voyage, or while at the port of departure, any person shall have been sick—or from any place in the ordinary passage from which they pass, south of Cape Henlopen,* arriving between the thirty-first day of May and the sixteenth day of October, and all vessels from any place (including islands) in Asia, Africa, or the

* It was proposed last winter, at Albany, to make this subdivision read, after the word discharged, "unless otherwise ordered by the Mayor and Commissioners of Health," which, if successful, would have referred the decision of the Health Officer, in every instance, to the Board of Appeal, and placed it in the responsible position of reversing an act *he* was, by law, compelled to enforce. Besides, it would have required the Board to be in constant session at the City Hall, and might have led, by deceptions, favoritisms, and altercations, to results in no way agreeable to the parties, or conducive to the health of the city.

In my judgment, this portion of the statute should remain as it was intentionally made by the disinterested practical men who framed it—unconditional and peremptory. I, however, advise the introduction, in the first and second lines, of the words "yellow, bilious, malignant, or any pestilential fever," in place of the words, "pestilential, contagious, or infectious disease," in order to exclude the itch, &c., (since excluded, together with syphilis, by the Act of 1853,) which the agents of the Commissioners of Emigration construe as within the meaning of the law, and thereby jeopardize the lives of persons with harmless maladies, by exposing them at the Quarantine ground, to the contagion of malignant diseases.—A. F. V.

† The following amendment was adopted by the Legislature, March 20, 1852. "Article, I. Title 2., Chapter 14., of the first part of the Revised Statutes, entitled of the place of Quarantine, and the vessels and persons engaged in the coasting trade between the port of New York and any of the Capes of Virginia, and such vessels and persons may at all times enter the port of New York without being subject to Quarantine, the same as if they did not pass to the south of Cape Henlopen, except there be sickness on board, when they shall be subject to the existing provisions of the law.

As the principal danger is from the vessel, the insertion of the words "from an unhealthy place, or" after the word "except," is required to guarantee safety to the health of the city.—A. F. V.

Mediterranean, or from any of the West India, Bahama, Bermuda, or Western islands, or from any place in America in the ordinary passage from which they pass south of Georgia, arriving between the first day of April and the first day of November, shall be subject to such Quarantine and other regulations as the Health Officer, with the approval of the Mayor and the Commissioners of Health, shall prescribe.

§ 3. All vessels and persons remaining at Quarantine on the first day of October, shall thereafter be subject to such Quarantine and restrictions as vessels and persons arriving on or after that day.

§ 4. The Board of Health, or the Mayor and the Commissioners of Health, whenever, in their judgment, the public health shall require, may order any vessel at the wharves of the city, or in their vicinity, to the Quarantine ground or other place of safety; and may require all persons, articles, or things, introduced into the city from such vessel, to be seized, returned on board, or removed to the Quarantine ground or other place. In case the master, owner, or consignee of the vessel cannot be found, or shall refuse or neglect to obey the order of removal, the Board of Health, or the Mayor and the Commissioners of Health shall have power to cause such removal at the expense of such master, owner, or consignee; and such vessel or person shall not return to the city without the written permission of the Board of Health, or of the Mayor and Commissioners of Health.

§ 5. If any vessel, arriving at the Quarantine ground, subject to Quarantine, shall be bound to some port east of the city of New York, the Health Officer, after having duly visited and examined her, may permit her to pass on her voyage through the Sound; but no such vessel shall be brought to anchor off the city, nor shall any of her crew or

passengers land in, or hold any communication with, the city or any person therefrom.

§ 6. No vessel found, on examination by the Health Officer, to be infected by the yellow fever, or to have been so infected, after sailing from her port of departure, or to have had on board any contagious, infectious, or pestilential disease, shall be permitted to approach within three hundred yards of the city of New York, without the consent of the Mayor and two of the Commissioners of Health.*

§ 7. Every vessel having had, during the voyage, a case of pestilential, infectious, or contagious disease, and every vessel from a foreign port having passengers, and not hereinbefore declared subject to Quarantine, shall, on her arrival at the Quarantine ground, be subject to visitation by the Health Officer, but shall not be detained beyond the time requisite for due examination, unless she shall have had on board, during the voyage, some case of infectious, contagious, or pestilential disease, in which case she shall be subject to such Quarantine as the Health Officer, and the Mayor, and the Commissioners of Health may prescribe; and it shall be the duty of the Health Officer, whenever he thinks it necessary for the preservation of the public health, to cause the persons on board any vessel to be vaccinated.†

* To be in accordance with the proposed amended phraseology of subdivision I, section 2, page 92, it will be necessary to strike out, from section 6, the words "yellow fever," in the second line, and insert the words "small pox, Asiatic cholera, yellow, bilious malignant, typhoid, or any pestilential fever; and, in the third and fourth lines, the words "contagious, infectious, or pestilential disease," and insert "any such disease."—A. F. V.

† The substitution of the following section, for section 7, will define its meaning more clearly. As it now stands, it is liable to construction adverse to its evident intention. "Every vessel, from a foreign port, having passengers, shall, on arrival at the Quarantine ground, be subject to visitation by the Health Officer, but shall not be detained beyond the time necessary for due examination; and every vessel having had on board during the voyage a case of Asiatic cholera, small-pox, typhoid, or any pestilential fever, and not hereinbefore declared subject to Quarantine, shall be put under "observation" at the Quarantine ground, during such time as the Health Officer and the Mayor and Commissioners of Health may direct; and it shall be the duty of the Health Officer, whenever he thinks it necessary for the preservation of the public health, to cause the persons from such vessels to be vaccinated.—A. F. V.

§ 8. The master of every vessel released from Quarantine, and arriving at the city of New York, shall, within twenty four hours after such release, deliver the permit of the Health Officer at the office of the Mayor.

§ 9. Nothing in this Act contained, shall prevent any vessel arriving at the Quarantine, from again going to sea before breaking bulk.

ARTICLE II.

OF THE DUTIES OF PILOTS IN RELATION TO VESSELS SUBJECT TO QUARANTINE.

§ 10. It shall be the duty of each branch and deputy Pilot belonging to the port, to use his utmost endeavors to hail every vessel which he shall discover to be entering the port, and to demand of the master of every such vessel whether any person has died or been sick on board during the passage, and whether any contagious, infectious, or pestilential disease existed at the time of her sailing at the port from whence she sailed.

§ 11. If any of the above questions shall be answered in the affirmative, the Pilot shall immediately give notice to the master of the vessel, that he, his vessel, his crew, passengers and cargo, are subject to the examination of the Health Officer; and shall direct him to proceed and anchor his vessel at the Quarantine anchorage, there to await the further directions of the Health Officer.

§ 12. It shall be the duty of every Pilot, who shall conduct into port a vessel, subject to Quarantine,

1. To bring such vessel to anchor within the buoys marking the Quarantine anchorage.

2. To prevent any vessel or boat from coming alongside of the vessel under his charge, and to prevent any thing on board from being thrown into any other vessel or boat.
3. To present to the master of the vessel a printed copy of this title, when such copy shall have been delivered to him for that purpose.
4. To take care that no violations of this title be committed by any person on board, and to report such as may be committed, as soon as may be to the Health Officer.

✱.

ARTICLE III.

REGULATIONS CONCERNING THE TREATMENT, CONDUCT, AND DUTIES OF VESSELS, ARTICLES, AND PERSONS UNDER QUARANTINE.

§ 13. It shall be the duty of the Health Officer to board every vessel, subject to Quarantine or visitation by him, immediately on her arrival, between sunrise and sunset; to inquire as to the health of all persons on board, and the condition of the vessel and cargo by inspection of the bill of health, manifest, log-book, or otherwise; to examine on oath as many and such persons on board of vessels suspected of coming from a sickly port, or having had sickness on board during the voyage, as he may judge expedient, and to report the facts and his conclusions, and especially to report the number of persons sick, and the nature of the disease with which they are afflicted, to the Mayor and Commissioners of Health, in writing.

§ 14. It shall be the duty of the Health Officer to reside within the Quarantine grounds, and he shall have power,

1. To remove from the Quarantine anchorage ground, any

vessel he may think unsafe, to any place south of the Quarantine buoys, and inside of Sandy Hook.

2. To cause any vessel under Quarantine, when he shall judge it necessary for the purification of the vessel or her cargo, to discharge her cargo at the Quarantine ground, or some other suitable place out of the city.
3. To cause any such vessel, or her cargo, bedding, and the clothing of persons on board, to be ventilated, cleansed, and purified in such manner, and during such time as he shall direct, and if he shall judge it necessary to prevent infection or contagion, to destroy any portion of such bedding or clothing; and with the authority of the Mayor or the Commissioners of Health, any portion of such cargo, which he may deem incapable of purification.
4. To prohibit and prevent all persons arriving in vessels subject to Quarantine, from leaving Quarantine, or removing their goods or baggage therefrom, until fifteen days after the sailing of their vessel from her port of departure, and fifteen days after the last case of pestilential, contagious, or infectious disease shall have occurred on board, and ten days after her arrival at Quarantine, unless sooner discharged by him, with the consent of the Mayor and the Commissioners of Health.*
5. To permit the cargo of any vessel under Quarantine, or any portion thereof, when he shall judge the same free from infection and contagion, to be conveyed to the city

* The following alteration is suggested to sub-division 4. Strike out all after the first word "To" in the first line and before the word "until," in the third line, and substitute "remove from vessels to the Quarantine Hospitals, and detain until cured, all persons sick with small-pox, Asiatic cholera, yellow, bilious malignant, typhoid, or any pestilential fever; to interdict the removal of all goods and baggage from said vessels to the city, and to prevent all persons arriving in vessels subject to Quarantine, except those having yellow fever on board, from leaving the Sanatory Refuge, or its vicinity."—A. F. V.

of New York, or such place as may be designated by the Mayor and the Commissioners of Health, after having reported, in writing, to the Mayor and the Commissioners of Health of said city, the condition of said cargo, and his intention to grant such permission; such permission, however, to be inoperative, without the written approval of the Mayor and the Commissioners of Health.

§ 15. The Health Officer may direct, in writing, any constable, or other citizen, to pursue and apprehend any person, not discharged who shall elope from the Marine Hospital, and to deliver such person at said hospital, to be there detained until regularly discharged, it shall be the duty of the constable, or other citizen so directed, to obey such directions; and every person who shall so elope, shall be considered guilty of a misdemeanor, punishable by fine or imprisonment.

§ 16. Every sick person sent to the Marine Hospital, shall be there kept and attended to with all necessary and proper care; and no such person shall leave the hospital until the Health Officer shall grant a discharge, in writing.*

§ 17. The Commissioners of Emigration shall remove from the Marine Hospital, and take charge of all immigrants whose Quarantine has expired, and who shall have sufficiently recovered from the diseases with which they were admitted, on the notification, in writing, of the Health Officer that such removal will not, with ordinary care, endanger the safety of the individual, or the health of the community.†

§ 18. The Health Officer, the Board of Health, or the

* All the duties assigned by this Act to the Health Officer, exclusive of jurisdiction, etc., over the water, have been transferred by the Act of 1853, to the Physician, (in Chief).—A. F. V.

† I recommend, between the words "shall" and "remove," on the first line of section 17, the introduction of the following words: "pay weekly to the Commissioners of Health, for the support of the Marine Hospital, fifty cents from the amount received by them from each person arriving at the port of New York, and the surplus remaining at the end of the year, from the amount so paid, shall be refunded to said Commissioners of Emigration, and they shall."

Mayor and the Commissioners of Health, may, if in their opinion it will not be dangerous to the public health, permit the cargo of any vessel under Quarantine, or any part thereof, to be shipped for exportation by sea, or transportation up the North or East Rivers; but if the vessel receiving the same shall approach nearer than three hundred yards to the wharves of the city, such cargo may be seized and sold by the Mayor and the Commissioners of Health, for the use of the Marine Hospital.

§ 19. Every vessel, during her Quarantine, shall be designated by colors, to be fixed in a conspicuous part of her main shrouds.

§ 20. No vessel or boat shall pass through the range of vessels lying at Quarantine, or land at the Quarantine ground after sunset, without the permission of the Health Officer.

§ 21. No lighter shall be employed to load or unload vessels lying at Quarantine, without permission of the Health Officer, and subject to such restrictions as he shall impose.

§ 22. All passengers under Quarantine, who shall be unable to maintain themselves, shall be provided for by the master of the vessel in which they shall have arrived; and if the master shall omit to provide for them, they shall be maintained on shore, at the expense of such vessel; and such vessel shall not be permitted to leave the Quarantine until such expense shall have been repaid.*

And, also, after the word "community," in the last line—"And the said Commissioners shall procure a proper location in the vicinity of the Quarantine ground, and erect thereon suitable buildings for the reception and detention of apparently healthy passengers, from on board of vessels arriving at the port with cases of small-pox, Asiatic cholera, or typhoid fever, which place shall be denominated the Sanitary Refuge."—A. F. V.

* The different constructions of this section, has not only led to considerable controversy, but will, probably, end in a suit at law. As the framers of it, doubtless, intended to make the vessel liable, the following amendment would set the question at rest, and furnish a strong incentive for the better

§ 23. The Health Officer, upon the application of the master of any vessel under Quarantine, may confine, in any suitable place on shore, any person on board of such vessel charged with having committed an offence punishable by the laws of this state, or the United States, and who cannot be secured on board such vessel; and such confinement may continue during the Quarantine of such person, or until he shall be proceeded against in due course of law; and the expenses thereof shall be charged and collected as in the last preceding section.

§ 24. The Mayor and the Commissioners of Health of said city shall constitute a Board of Appeal, from any direction or regulation of the Health Officer, with power to grant such and so much relief as may appear to such Board, or a majority of them, meet and proper; the decision of said Board of Appeal to be final. *

§ 25. Every appeal from a decision of the Health Officer, shall be made by serving upon him a written notice of such appeal, within twelve hours after such decision, (Sundays excepted,) and the Health Officer shall make a return in writing, including the facts on which his decision is founded, within twelve hours after the receipt of such notice, (Sundays excepted,) to the Mayor, who shall immediately call a meeting of the Board of Appeal, and shall be President of the said Board; and said appeal shall be heard and decided within twenty-four hours thereafter, (Sundays excepted,) and the execution of the decision appealed from shall be suspended until the determination of the appeal.

protection of passengers at sea. "All passengers under Quarantine, whether detained on board a vessel or on shore, shall be provided for and maintained at the expense of the vessel in which they shall have arrived; and the Health Officer shall not permit the vessel to leave Quarantine, until such expense shall have been repaid."—A. F. V.

* The insertion of the word "discretionary" before the word "direction," in the second line, is of considerable importance. Without it, the section has been interpreted to mean, that the Board of Appeal has the power to change the order of the Health Officer, when, in strict conformity with the statute, whereas its intention was to prevent the unnecessary detention of vessels, cargoes, and passengers, by the order of that officer, when the duration is not fixed by law.

ARTICLE IV.

OF THE REGULATION OF INTERCOURSE WITH INFECTED PLACES.

§ 26. The Mayor of the city of New York may issue his proclamation, declaring any place, where there shall be reason to believe a pestilential, contagious, or infectious disease actually exists, to be an infected place within the meaning of the Health Laws of this state.

§ 27. Such proclamation shall fix the period when it shall cease to have effect; but such period, if they shall judge the public health to require it, may, from time to time, be extended by the Board of Health, and notice of such extension shall be published in one or more of the newspapers of the city.

§ 28. After such proclamation shall have been issued, all vessels arriving in the port of New York from such infected place, shall be subject to a Quarantine of at least thirty days, or until the period when such proclamation shall cease to have effect as provided by the last preceding section, and shall, together with their officers, crews, passengers, and cargoes, be subject to all the provisions, regulations, and penalties of this act, in relation to vessels subject to Quarantine.

§ 29. The Board of Health may, in their discretion, prohibit or regulate the internal intercourse by land or water, between the city of New York and such infected place; and may direct, that all persons who shall come into the city of New York, contrary to their prohibitions or regulations, shall be apprehended and conveyed to the vessel or place whence they last came; or if sick, that they be conveyed to the Marine Hospital, or such other place as the Board of Health shall direct.

ARTICLE V.

PENALTIES FOR VIOLATING THE PROVISIONS OF THIS TITLE.

§ 30. Every master of a vessel subject to Quarantine or visitation, arriving in the port of New York, who shall refuse or neglect either—

1. To proceed with, and anchor his vessel at the place assigned for Quarantine, at the time of his arrival :
2. To submit his vessel, cargo, and passengers to the examination of the Health Officer, and to furnish all necessary information to enable that officer to determine to what length of Quarantine and other regulations they ought respectfully to be subject ; or—
3. To remain with his vessel at Quarantine during the period assigned for her Quarantine—and, while at Quarantine, to comply with the directions and regulations prescribed by law, and with such as any of the officers of health, by virtue of the authority given to them by law, shall prescribe in relation to his vessel, his cargo, himself, his passengers, or his crew, shall be guilty of a misdemeanor, and be punished by a fine not exceeding two thousand dollar, or by imprisonment not exceeding twelve months, or by both such fine and imprisonment.

§ 31. Every master of a vessel, hailed by a pilot, who shall either—

1. Give false information to such pilot, relative to the condition of his vessel, crew, passengers, or cargo, or the health of the place or places whence he came—or refuse to give such information as shall be lawfully required :
2. Or land any person from his vessel, or permit any per

son, except a pilot, to come on board his vessel, or unlade or tranship any portion of her cargo, before his vessel shall have been visited and examined by the Health Officer:

3. Or shall approach with his vessel nearer the city of New York than the place of Quarantine, to which he shall be directed, shall be guilty of the like offence, and be subject to the like punishment.

And every person who shall land from any such vessel, or unlade or tranship any portion of her cargo, under like circumstances, shall be guilty of the like offence, and be subject to the like punishment.

§ 32. Every person who shall violate any provision of this title, or neglect or refuse to comply with the directions and regulations which any of the officers of health may prescribe, shall be guilty of the like offence, and be subject, for each offence, to the like punishment.

§ 33. Every person who shall oppose or obstruct the Health Officer in performing the duties required of him, shall be guilty of the like offence, and be punished by a fine not exceeding five hundred dollars, or by imprisonment not exceeding three months, or by both such fine and imprisonment.

§ 34. Every person who, without authority, shall go within the inclosure of the Quarantine ground, shall be guilty of a like offence, and be punished by a fine not exceeding one hundred dollars, or by imprisonment not exceeding thirty days, or by both such fine or imprisonment.

§ 35. Every person who shall go on board of, or have any communication, intercourse, or dealing with any vessel at

Quarantine, without the permission of the Health Officer, or who shall invade, without authority, the Quarantine grounds, shall be guilty of the like offence, and be subject to the like punishment ; and such offender shall be detained at Quarantine so long as the Health Officer shall direct, not exceeding twenty days ; in case such person shall be taken sick of any such pestilential, contagious or infectious disease, during such twenty days, he shall be detained till further time at the Marine Hospital, as the Health Officer shall direct.

§ 36. Every person who shall violate the provisions of Article IV., of this title, by refusing or neglecting to obey or comply with any order, prohibition, or regulation made by the Board of Health, in the exercise of the powers therein conferred, shall be guilty of a misdemeanor, punishable by fine and imprisonment, in the discretion of the court, by which the offender shall be tried.

TITLE III.

INTERNAL REGULATIONS FOR THE PRESERVATION OF THE PUBLIC HEALTH OF THE CITY OF NEW YORK.

ARTICLE I.

OF CERTAIN DUTIES AND POWERS OF THE CITY INSPECTOR, THE
BOARD OF HEALTH, AND THE MAYOR AND COMMISSIONERS OF
HEALTH.

§ 1 The City Inspector of the city of New York shall have power—

1. To appoint, by and with the advice and consent of the Board of Aldermen of said city, from time to time, all and so many Health Wardens and other officers, as the

Common Council or the Board of Health shall direct, to carry into effect the provisions of this title, and the rules and regulations of the Board of Health, the laws and ordinances of the Common Council of said city, and the laws of this state, relating to the public health. Such Health Wardens and Officers shall be subject to the supervision and control of the City Inspector.

2. To authorize such officers at such times as he shall think fit, to enter into and examine in the day-time all buildings, lots, and places of every description within the city, and to ascertain and report to the Mayor and the Commissioners of Health, the condition thereof, so far as the public health may be affected thereby.
3. It shall be the duty of the City Inspector, on complaint being made to him, or whenever he shall deem any business, trade, or profession, carried on by any person or persons in the city of New York, detrimental to the public health, to notify such person or persons to show cause, before the Board of Health, at a time and place to be specified in such notice, why the same should not be discontinued or removed, which notice shall be a notice of not less than three days, (except in case of epidemic or pestilence, the Board of Health may, by general order, direct a shorter time, not less than twenty-four hours,) and may be served by leaving the same at the place of business or residence of the parties to be affected thereby. Cause may be shown by affidavit, and the order of the Board of Health shall be final and conclusive thereon.
4. The said City Inspector to give all such directions, and adopt all such measures for cleansing and purifying all such buildings, lots, and other places, and to do or cause to be done, every thing in relation thereto, which, in the

opinion of the Mayor and the Commissioners of Health of the city, shall be deemed necessary. Every person who shall disobey any order of the City Inspector, or of the Board of Health, which shall have been personally served upon them, to abate or remove any nuisance in the manner and at the time described in such order, shall, on complaint of the City Inspector, or of the person serving such order, before the Mayor or any Police Justice of said city, be liable to arrest and summary punishment by fine, not exceeding one thousand dollars, or imprisonment not exceeding one year, or by both such fine and imprisonment.

5. To adopt such prompt measures to prevent the spreading of any contagious, infectious, or pestilential disease, as shall be directed by the Mayor and the Commissioners of Health, when it shall appear to the Mayor and Commissioners of Health, that any person within the city is afflicted with any disease of that character.

§ 2. The Mayor, Aldermen, and Commonalty of the city of New York, shall have full power and authority to make and pass all such by-laws and ordinances, as they shall, from time to time, deem necessary and proper for the preservation of the public health of said city, and, also, for the abatement and removal of all and every nuisance in said city, and for compelling the proprietors or owners of the lot or lots upon which the same may be, to abate and remove the same.

§ 3. It shall be lawful for the said Mayor, Aldermen, and Commonalty, in all cases where they may deem it necessary for the more speedy execution of said by-laws or ordinances, or any of them, to cause any such nuisance or nuisances to be abated or removed at their own expense, and they are hereby authorized to levy and collect the sum or sums so expended, with lawful interest, and all reasonable costs and expenses



attending such proceedings, by distress and sale of the goods and chattels of the proprietors or owners of the lots and premises, from which such nuisance or nuisances shall have been abated or removed, or to recover the amount of every such expense, by action in any court of record, from such owner or owners respectively, on whose account the same shall have been expended, their respective heirs, executors, or administrators; in all which actions they shall, also, recover lawful interest upon the amount of said expense from the time of payment thereof, with full costs of suit.

§ 4. That the amount of every such expense, which the said Mayor, Aldermen, and Commonalty shall incur or pay, as aforesaid, on account of the owner or owners of such lots or premises, for the abatement or removal of any such nuisance or nuisances, shall be a real incumbrance upon the lots and premises from or upon which nuisance or nuisances shall be abated or removed, and shall bear lawful interest until paid, and that the same may be recovered, or the payment thereof, with costs, enforced in like manner, as if the said lots and premises were mortgaged to the said Mayor, Aldermen, and Commonalty for the payment thereof.

§ 5. It shall be the duty of the Board of Health—

1. To cause any avenue, street, alley, or other passage whatever, to be fenced up or otherwise inclosed, if they shall think the public safety requires it, and to adopt suitable measures for preventing all persons from going to any part of the city so inclosed.
2. To forbid and prevent all communication with the house or family infected with any contagious, infectious, or pestilential disease, except by means of physicians, nurses, or messengers, to carry the necessary advice, medicines, and provisions to the afflicted.

3. To adopt such measures for preventing all communication between any part of the city infected with a disease of a pestilential, infectious, or contagious character, and all other parts of the city, as shall be prompt and effectual.
4. To procure suitable places for the reception of persons sick of any pestilential, infectious, or contagious disease, and in all cases where sick persons cannot otherwise be provided for, and procure for them proper medical and other attendance and provision.
5. To publish, from time to time, all such regulations as they shall have made, in such manner as to secure early and full publicity thereto.
6. To issue warrants to any constable or police officer in said city, to apprehend and to remove such person and persons as cannot otherwise be subjected to the regulations by them adopted; and whenever it shall be necessary so to do, to issue their warrant to the sheriff of the city and county of New York, to bring to their aid the power of the county; all which warrants shall be forthwith executed by the officers to whom the same shall be directed, who shall possess the like powers and be subject to the like duties in the execution thereof, as if the same had been duly issued out of any Court of Record in this state.

§ 6. The Board of Health, or the Mayor and the Commissioners of Health, when they shall judge it necessary, may cause any cargo, or part of cargo, or any matter or thing within the city, that may be putrid, or otherwise dangerous to the public health, to be destroyed or removed; such removal, when ordered, shall be to the Quarantine ground, or such other place as the Board of Health shall direct; such

removal or destruction shall be made at the expense of the owner or owners of the property so removed or destroyed, and the same may be recovered from such owner or owners, in an action at law, by the Mayor, Aldermen, and Commonalty of said city.

§ 7. The Board of Health, may send to the Marine Hospital, or such other place as the Board of Health may direct, all aliens and other persons in the city, not residents thereof, who shall be sick of any infectious, pestilential, or contagious disease. The expense of the support of such aliens or other persons shall be defrayed by the Corporation of the city of New York, unless such aliens or other persons shall be entitled to be supported by the Commissioners of Emigration.

§ 8. The Board of Health shall have power to take possession of, and occupy, for temporary hospitals, any building or buildings in the said city, during the prevalence of an epidemic, if, in their judgment, the same may be required, and shall pay, for private property so taken, a just compensation for the same.

§ 9. It shall be the duty of the Mayor and the Commissioners of Health, from time to time, to communicate to the Board of Health, all reports that shall be made to them, or either of them, under the provisions of this law; and it shall be the further duty of the Mayor and the Commissioners of Health, and of each of them, so to communicate all information in their power that may the better enable the Board of Health to preserve the health of the city.

ARTICLE II.

OF THE DUTIES OF PHYSICIANS AND OTHER PERSONS.

§ 10. It shall be the duty of each and every practicing physician in the city of New York,

1. Whenever required by the Board of Health, or the Mayor, and the Commissioners of Health of said city, to report to the City Inspector of said city, at such times, in such forms as said Board may prescribe, the number of persons attacked with any pestilential, contagious, or infectious disease, attended by such physician for the twenty-four hours next preceding, and the number of persons attended by such physician, who shall have died in said city during the twenty-four hours next preceding such report, of any such pestilential, contagious, or infectious disease.
2. To report, in writing, to the City Inspector, the Board of Health, or to the Mayor and the Commissioners of Health, every patient he shall have, laboring under any pestilential, contagious, or infectious disease, and within twenty-four hours after he shall ascertain or suspect the nature of the disease.
3. To report to the City Inspector, when required by the Board of Health, the death of any of his patients, who shall have died of disease, within twenty-four hours thereafter such death shall have occurred, and to state in such report the specific name and type of such disease.

§ 11. Every person keeping a boarding or lodging-house in the city of New York, shall, whenever required by the Mayor and the Commissioners of Health, report, in writing, to the City Inspector, the Board of Health, or the Mayor and the Commissioners of Health, the name of every person who shall be sick in his house, within twelve hours after each case of sickness shall have occurred.

§ 12. Every master, owner, or consignee of a vessel, lying at a wharf, or in the harbor of the city of New York, shall make a like report, and within the same period, of the name

of every sick person on board such vessel; and no person shall be removed therefrom without a written permit for that purpose from the Board of Health, or the Mayor, or one of the Commissioners of Health.

§ 13. It shall be the duty of each Commissioner of Health, and of each visiting, hospital, and consulting physician, to make an immediate report to the Board of Health, of the name of every practicing physician, by whom he shall have reason to believe the provisions of the tenth section of this title have been violated; and if such physician shall neglect or refuse to perform his duty, the Board shall suspend him from his office, and he shall moreover be liable to such further penalty as the said Board shall prescribe.

ARTICLE III.

PROHIBITIONS AND PENALTIES.

§ 14. The Board of Health shall have power to prohibit at such times, and for such period and periods of time as they shall see cause, the packing and re-packing of any salted provisions in any and all parts of the city.

§ 15. No salted or pickled beef, pork, or fish, (except smoked beef and fish,) shall be deposited in such part or parts of the city, during the period or periods of time so prohibited by the Board of Health under the last preceding section.

§ 16. The last preceding section shall not be construed to prevent retail grocers, or other small dealers, from keeping on hand, for the use of their customers, small quantities, not exceeding five barrels, of each kind of provisions therein mentioned, if the provisions so kept be sound and in good order.

§ 17. All salted or pickled provisions, and all hides, skins, and cotton, that may be deposited in those parts of the city, wherein the Board of Health shall prohibit the packing or re-packing of salted provisions, at the time or times when such prohibition may be made, shall be reported forthwith, by the owner or person having charge thereof, to the office of the City Inspector, that the same may be examined, and, if necessary, destroyed or removed.

§ 18. If such articles, when ordered to be removed by the City Inspector, shall not be forthwith removed by the owner or person having charge thereof, the City Inspector shall cause them to be removed to some safe place, there to remain at the risk of the owner.

§ 19. The expense of the removal, and subsequent storage of such articles, shall be borne by the owner or person having charge thereof, when removed, and if paid in the first instance by the City Inspector, may be recovered by the City Inspector, in an action against such owner or bailee, or if payment of such expenses be refused by the owner or bailee, the City Inspector may cause such articles to be sold, and shall account for the proceeds, deducting such expenses and the costs of sale.

§ 20. Nothing contained in this article shall be construed to extend to provisions exposed for sale by butchers in the public markets, or kept by the heads of families for family use.

§ 21. Every person who shall refuse or neglect to obey the directions of this article, or of the Board of Health, or City Inspector, pursuant thereto, in relation to the provisions and other articles above mentioned, shall be considered guilty of a misdemeanor, and on conviction shall be subject to fine or imprisonment, or both, at the discretion of the Court. Such

ne shall not exceed one thousand dollars, and such imprisonment shall not exceed two years.

§ 22. No rags, hides, or skins, arriving in the port of New York, shall be deposited in any part of the city, within which the Board of Health shall have prohibited the packing or repacking of salted provisions, and all such articles, brought into the city contrary to the above provision, may be seized and sold by the Mayor and the Commissioners of Health for the use of the Marine Hospital.

§ 23. The Board of Health, or the Mayor and the Commissioners of Health, may, however, permit sound hides and skins to be brought into any part of the city, in small quantities, and for the purpose of immediate manufacture, but not otherwise.

§ 24. It shall be the duty of the master and owner of every vessel that shall have brought cotton into the city, between the first day of May and the first day of November, in any year, and of the owner and consignee of such cotton, if upon examination, it shall appear damaged, or otherwise unsound, to make an immediate report thereof to the Mayor and the Commissioners of Health.

§ 25. Every master, or owner, or consignee, refusing or neglecting to perform the duties so enjoined, shall, for each offence, forfeit to the Commissioners of Health the sum of five hundred dollars.

§ 26. Every person who shall violate any regulation, order, or direction of the City Inspector, or of the Board of Health, made or given in the exercise of any of the powers vested in them by any section of this title, shall be considered guilty of a misdemeanor, and on conviction thereof, be subject to fine or imprisonment, or both, at the discretion of the court.

Such fine shall not exceed one thousand dollars, and such imprisonment shall not exceed two years.

§ 27. Every practicing physician, who shall refuse or neglect to perform the duties enjoined on him by the tenth section of this title, shall be considered guilty of a misdemeanor, and shall also forfeit for each offence the sum of two hundred and fifty dollars, to be sued for and recovered by the Board of Health.

§ 28. Every keeper of a boarding or lodging-house, and every master, owner, or consignee of a vessel, who shall refuse or neglect to obey the orders and directions of the Mayor and the Commissioners of Health, as provided in the eleventh and twelfth sections of this title, shall be considered guilty of a misdemeanor, and on connection shall be fined for each offence in a sum not exceeding two hundred and fifty dollars, or be imprisoned for a term not exceeding six months.

ARTICLE IV.

GENERAL PROVISIONS.

§ 29. Whenever it shall appear to the Board of Health, that any of the provisions of this act, limited in their operations to a certain period of the year, ought to be extended, the Mayor of the city shall issue his proclamation, extending such provisions to such time as shall be determined on by said Board, and such provisions shall thereupon be extended accordingly, and with the like effect, as if the periods mentioned in the proclamation had been herein enacted.

§ 30. If it shall appear to the Board of Health, while such proclamation is still in force, that the necessity of extending the period therein named has ceased, the Mayor, by a new proclamation, declaring that fact, shall revoke the proclamation issued, pursuant to the preceding section, which shall then cease to have effect.

§ 31. All fines, forfeitures and penalties imposed in this act or under the powers delegated therein, shall be paid to the Health Commissioners, to and for the use of the city of New York, and such as are recoverable by suit, shall be sued for by the Commissioners of Health, in their name of office, unless otherwise herein provided.

§ 32. It shall be the duty of the Mayor and the Commissioners of Health, and of each of them, to give information to the District Attorney of the city and county of New York, of all offences against the provisions of this act that shall come to their knowledge, that he may prosecute the offenders without delay, in the Court of Sessions of the city

§ 33. No suit that shall be brought by the Board or Commissioners of Health, or the Health Officer, or City Inspector, in their respective names of office, in pursuance of the authority given in this act, shall abate, on account of the death of the officer or officers by whom the same shall be commenced.

§ 34. The provisions of the foregoing titles of this act shall extend to all diseases which, in the opinion of the Board of Health, or of the Mayor and Commissioners of Health, shall be deemed dangerous to the public health; and nothing in this act shall be construed to interfere with the remedies against nuisances, provided by the common law.

§ 35. The Mayor and the Commissioners of Health shall, from time to time, cause such parts as they shall deem necessary of this act, to be printed, and shall deliver the same to the respective pilots of the port for distribution to the masters of vessels subject to Quarantine.

‡ 36. It shall be the special duty of all magistrates and civil officers, and of all citizens of the state, to aid, to the

utmost of their power, the Board of Health, and all the health officers mentioned in this act, in performance of their respective duties.

§ 37. Bills of Health, to Masters of vessels, shall be granted by the Mayor.

§ 38. The act entitled, "An act concerning Quarantine, and regulations in the nature of Quarantine, at the port of New York," passed May 13, 1846, is hereby repealed; but such repeal shall be in no wise construed or deemed to revive any act or part of an act repealed thereby. And all other laws inconsistent with this act are hereby repealed.*

But nothing contained in this act shall be construed as repealing any part of the act entitled, "An act to amend the charter of the city of New York, passed April 2d, 1849.

§ 39. This act shall take effect immediately.

STATE OF NEW YORK, }
 SECRETARY'S OFFICE. } I have compared the preceding
 original law on file in this office, and do hereby certify
 that the same is a correct transcript therefrom, and of
 the whole of said original.

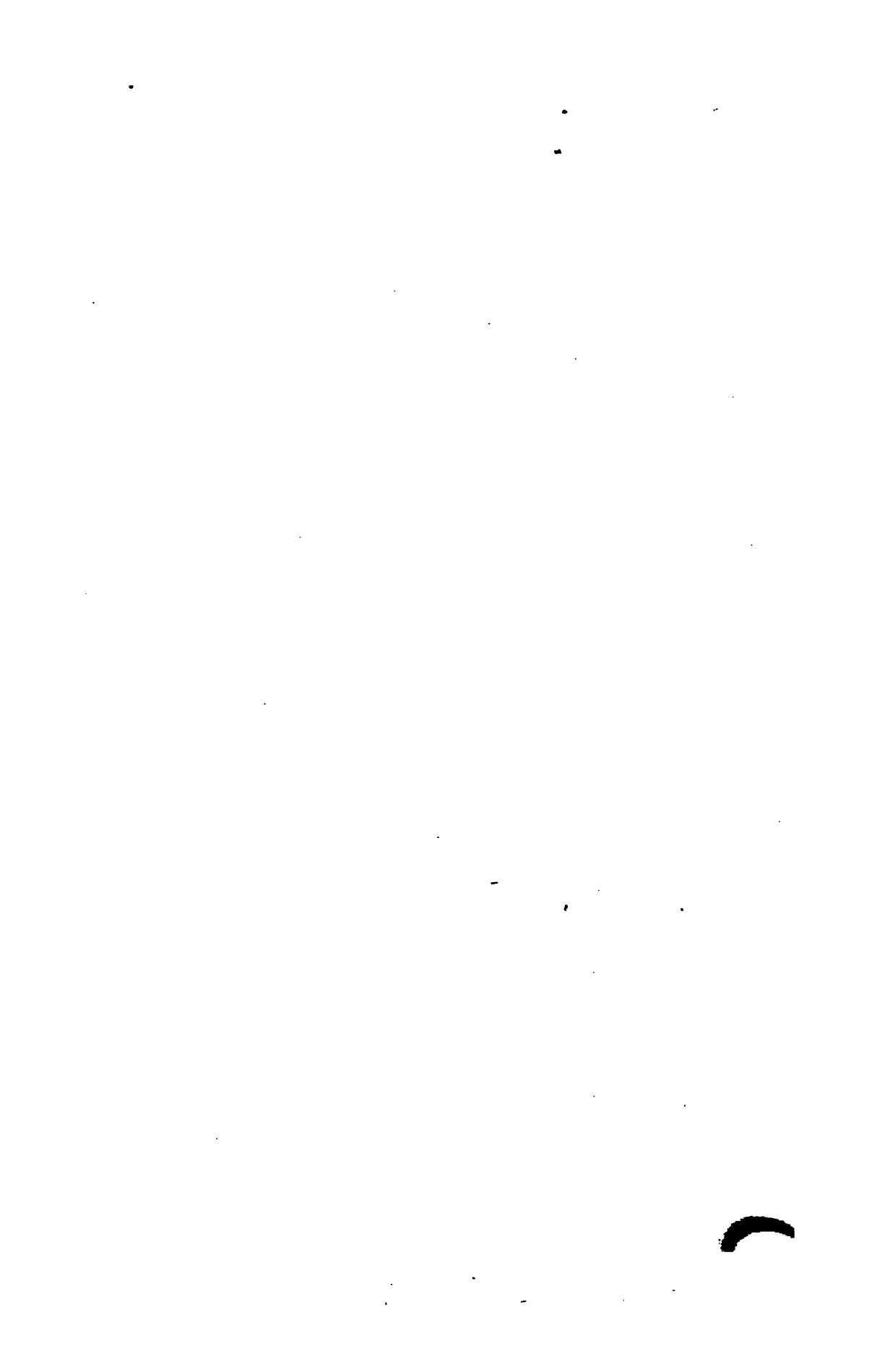
[L. s.] Given under my hand and seal of office, this
 eleventh day of April, one thousand eight hundred and fifty.

A. G. JOHNSON,
Deputy Secretary of State.

* The restoration of the government of the Marine Hospital to the Commissioners of Health, will require the annexation of the subjoined amendment, after the word "repealed," in the last line of section 38, as well "as all laws divesting the regulation and control of the Marine Hospital from the Commissioners of Health, and conferring the same on the Commissioners of Emigration."

A. F. V.





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